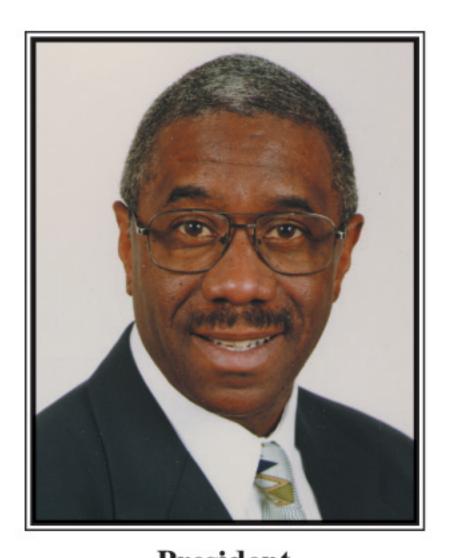


# **DENVER WATER**

**Denver, Colorado** 

# Denver Board of Water Commissioners



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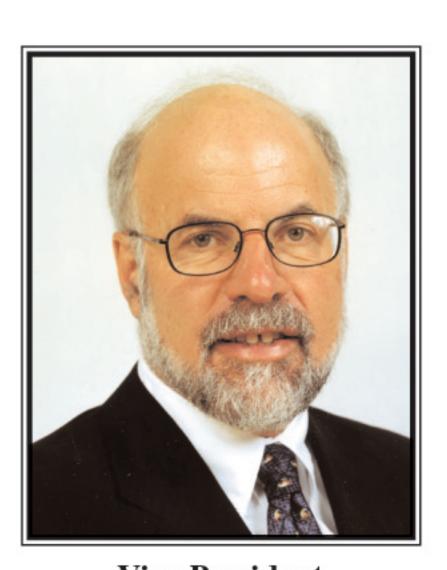
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\*\*Budget Committee



February 27, 2003

Board of Water Commissioners City and County of Denver Denver, Colorado 80204-3412

Re: Denver Water 2003 Budget

Chips Barry, Manager

To Our Customers and Other Interested Readers:

On December 18, 2002, the Board of Water Commissioners adopted Denver Water's 2003 budget. This budget reflects our two principal commitments to our customers: to provide an adequate and reliable supply of high-quality water and to develop additional supplies for the future.

Without a doubt, 2002 was one of the most challenging ever for Denver Water. The worst drought in Colorado history reduced snow-pack depths and reservoir levels to those not seen since 1954. Forest fires affected 7,043 acres of Denver Water lands and much of our South Platte watershed. Battling these natural disasters consumed a disproportionate share of our budget, staff time, and focus.

Drought and fire also impacted Denver Water's customers. As available water supplies fell, we asked them to reduce their consumption: first voluntarily, then as a mandatory requirement brought on by worsening drought conditions.

Natural disasters also had a financial impact on Denver Water and our customers. Because of the fires, we incurred unbudgeted costs for everything from firefighting to habitat restoration. Our customers now pay a water-consumption surcharge, the revenue from which partially offsets the costs of our drought- and fire-response efforts. As well, developers now pay a new tap surcharge to support an incentive program that encourages the use of water-saving appliances by current customers.

Despite the demands of drought and fire, Denver Water kept a series of significant capital-construction projects on schedule in 2002—projects that will ultimately improve our ability to serve an increasing customer base more reliably and efficiently.

I've included more information about our fire-, drought-, and construction-related efforts, and their costs, below.

As the drought continues, our challenges in 2003 are similar to those of 2002: manage and maintain an adequate and reliable water supply, even as the accumulation of that supply remains unpredictable. We will continue to do so to the best of our abilities for the benefit of our customers.

#### Responding to the Drought.

The Denver area is experiencing its worst drought in recorded history. Since the summer of 2002, our customers have been on voluntary and then mandatory water restrictions.

Denver Water has a guiding plan for managing water supplies and restricting water use during a drought. This drought response plan seeks to strike the appropriate balance between using water wisely and reserving it in storage. The plan's primary goal is to manage water use so that a supply will be available for the most essential uses for the duration of the drought.

To that end, we asked our customers last June to reduce water consumption voluntarily. Despite their positive response, the increasing severity of the drought forced us to impose mandatory water-use restrictions, penalties for violating water rules, and a water-utilization-reduction target of 30 percent. All remain in effect today and will be adjusted as necessary during 2003.

Denver Water also imposed two drought-related surcharges: a water-consumption surcharge to provide an enforcement mechanism for other drought restrictions, a financial incentive for water conservation and a way to help defray drought- and wildfire-related costs; and a tap surcharge paid by developers, the funds from which are used in a rebate program to encourage the use of water-efficient toilets and washing machines by existing customers, as well as to fund additional water-conservation programs focused on reducing demand.

Denver Water incurred \$2.4 million in drought-related costs in 2002.

#### Responding to the Fires

Two fires impacted Denver Water facilities and taxed our resources significantly in 2002: the Schoonover fire, which affected 25 acres; and the Hayman fire, which affected 7,043 acres on our land at Cheesman Reservoir and 134,000 acres total in our watershed.

These fires stripped significant amounts of vegetation from lands around the reservoirs, making the risk of sediment washing into them significant. Our response was immediate. We helped fund firefighting efforts. We deployed employees to reseed burned areas and install temporary sediment and erosion-control facilities. We hired aerial seeding companies to rehabilitate difficult-to-access terrain. And we installed floating booms to ensure that debris did not damage reservoir outlets.

Denver Water spent \$81,000 supporting firefighting efforts last year; we spent another \$2.9 million restoring and rehabilitating landscapes. To help defray our restoration and rehabilitation costs, we applied for monies available under grant programs of the U.S. Department of Agriculture and U.S. Environmental Protection Agency. To date, we have received \$535,000 and qualified for an additional \$2.4 million under the terms of these programs. We will continue our rehabilitation efforts in 2003, utilizing these grant programs to help defray our costs.

Denver Water incurred \$2.9 million in fire related costs in 2002, and we expect that figure to be \$2.1 million in 2003.

#### **Capital Construction**

Denver Water kept a series of significant capital-construction projects on schedule last year, including:

Recycled Water Plant. We continued the first phase of a two-phase construction effort associated with the Recycled Water Plant. When the first phase is complete, the plant will produce 30 million gallons of recycled water a day. The projected cost of this phase is \$89 million, of which \$30.6 million for the treatment plant and distribution system was spent in 2002 and \$49.2 million has been spent to date. The plant is scheduled to begin operating in early 2004.

<u>Marston Treatment Plant Upgrade</u>. We are nearing the completion of significant upgrades and improvements at the Marston Treatment Plant that will improve water quality and water-production efficiency and increase treatment capacity. The total projected cost for this effort is \$36.9 million, of which \$18.3 million was spent in 2002. The work is scheduled to be complete this summer.

<u>Foothills Treatment Plant Improvements.</u> Last year we completed a two-year effort to construct disinfection improvements and a finished water-storage basin at the Foothills Treatment Plant. The project enables us to comply with water-quality regulations and provides an additional 25 million gallons of water-storage capacity. The total project cost was \$26.7million, of which \$5.9 million was spent in 2002.

#### 2003 Goals and Objectives

Denver Water's goals and objectives are driven by our Strategic and Integrated Resource Plans. The top six goals for 2003 are:

#### Manage Water Supplies During Drought

During the first quarter of 2003, we will closely monitor the winter snow pack, which will help us predict the anticipated runoff and reservoir inflow for this year. We are also preparing a variety of demand-management programs that will allow us to use our water supply wisely in response to the severity of the drought. The public education campaign focusing on water conservation, watering restrictions, surcharges to encourage reduced consumption, and the rebate program will continue in 2003.

#### Restore Watersheds Damaged by Wildfires

Our restoration efforts will continue in 2003 and will include reseeding the area, removing standing burnt trees, and building sediment traps along Goose Creek which will stop sediment from moving into the reservoir. The financial burden of these efforts has been reduced through grants from the U.S. Department of Agriculture and the U.S. Environmental Protection Agency.

#### Finish Construction of First Phase of Recycled Water Plant

Construction of the first phase of the Recycled Water Plant will continue in 2003 with completion scheduled for the spring of 2004. The plant design anticipates a future expansion that will eventually allow its capacity to increase to 45 million gallons per day.

#### **Evaluate Safety and Security**

Denver Water will evaluate and implement many recommendations of a recent vulnerability assessment. Vulnerability assessments are required by federal law for all water utilities in the aftermath of the September 11, 2001 attacks.

#### Continue Technological and Operational Improvements

Denver Water will continue with several important technological and operational projects designed to increase our efficiency and ability to serve our customers. These projects include the selection of a new customer information and billing system, which will allow us to respond more quickly to customer inquiries, change from bimonthly to monthly billing, and design water rates which better reflect our service costs.

We will also continue with the installation of our automated meter reading program, which will allow us to read meters through the use of radio-frequency technology and eliminate manual meter reading. This improvement increases the speed with which meters can be read, allowing us to provide customers with more timely information about their water consumption patterns through monthly billings. A third project will begin in 2003 to evaluate the potential of increasing our customers' ability to access their consumption information and make service or other requests via our Web site.

#### Continue Water Supply Planning For Denver System

In 2003, we will continue to work on various means and methods for adding to the reliable water supply needed to serve customers in our combined service area in the future. We have begun work on defining the options for a solution to the water-supply problems on the north end of our system, which brings water through the Moffat Treatment Plant to Denver and many of its northern suburbs. We will also continue to look for opportunities to buy additional water rights, construct additions to existing storage, and otherwise maximize the yield available from the Denver system to serve the future needs of our customers.

#### 2002 Budget Performance

#### Receipts

In 2002, Denver Water's receipts were \$220.3 million, which was \$483,000 more than budgeted. The small increase is a net of higher than expected systems development charges of \$9.2 million, investment income of \$3.7 million, unbudgeted drought and tap surcharges totaling \$2.1 million and an unbudgeted NRCS grant of \$535,000 for Hayman fire rehabilitation work at Cheesman Reservoir. Offsetting these increases were decreases of \$16.0 million for a budgeted sale of Certificates of Participation that was not required due to higher than anticipated cash balances early in the year and sale of water to customers was \$2.6 million less than budgeted due to watering restrictions as a result of the drought.

Receipts from the sale of water are Denver Water's largest source of funds. In 2002, these sales were \$146.2 million. This revenue was \$2.6 million (1.7%) less than the budget due to water restrictions as a result of the drought.

The drought and tap surcharges that went into effect September 18, 2002 to encourage conservation resulted in receipts of \$776,000 and \$1.3 million, respectively.

A total of \$535,000 was received from the NRCS grant in 2002 to help mitigate the costs of repairing the landscape around Cheesman Reservoir as a result the June 2002 Hayman fire. In September 2002, Denver Water refinanced approximately \$11.6 million of general obligation bonds. The \$16.0 million in new Certificates of Participation budgeted for March was not required due to higher than anticipated cash balances early in the year as well as the desire to know the

outcome of the proposed charter change before approaching the capital markets for new money. The City charter was changed in November 2002 to remove Denver Water's authority to issue general obligation bonds. In the future, like most enterprises, Denver Water will issue revenue bonds.

In 2002, System Development Charge (SDC) receipts of \$36.6 million exceeded the budget by \$9.2 million. Denver Water received an unbudgeted SDC receipt of \$5.0 million from Cherry Creek Water and Sanitation District for system improvements related to their conversion to total service.

Income from investments totaled \$3.7 million more than budgeted due to net unrealized gains on the long term investment portfolio.

#### Operation and Maintenance

Operation and Maintenance expenditures in 2002 of \$95.4 million exceeded the budget by \$4.2 million (4.5%). This variance was primarily due to Hayman fire costs of \$2.9 million and drought response and conservation rebate expenditures of \$1.4 million and \$162,000, respectively.

#### Capital Expenditures

In 2002, Capital Expenditures of \$119.8 million were \$6.2 million (5.5%) more than budgeted due to unbudgeted land acquisitions for Wynetka Decentralization Station relocation, Antero and Eleven Mile Reservoirs totaling \$3.5 million, and changes in the construction schedule for Dillon Reservoir spillway construction of \$2.2 million.

#### **Debt Service**

Debt Service was \$2.5 million greater than budget as some bonds with higher than market interest rates were called or purchased on the secondary market. The series 1992 bonds were retired during the year as part of this effort, which was stopped when the severity of the drought became apparent

#### **Number of Employees**

The number of actual regular employees at the end of 2002 was 1036, 3 less than the high of 1,039 in 1991. The number of customers increased by 14.3% during the same period.

#### Payroll and Benefits

Payroll expenses in 2002 were \$59.1 million; \$630,000 (1.1%) more than budgeted primarily due to additional security requirements and unanticipated main replacements and improvements. Employee benefit plan premiums were \$22.3 million; \$1.5 million (7.3%) more than budgeted substantially due to increases for Defined Benefit Retirement plan costs and workers compensation partially offset by a decrease in health care from budget.

#### **Designated Balance**

The Designated Ending Balance for year-end 2002 of \$156.5 million was \$12.4 million less than budgeted. This decrease was substantially due to \$16.0 million budgeted for COPs which were not sold, \$2.6 for lower water sales as a result of the drought, Hayman fire related costs of \$2.9 million and drought response and conservation rebates totaling \$2.4 million. Receipts from SDCs of \$9.2 million and Income from Investments of \$3.7 million were more than expected.

The 2002 Designated Ending Balance is allocated as follows: Operation and Maintenance in the amount of \$27.0 million, Non-Expansion Capital in the amount of \$10.6 million, Debt Service reserves of \$33.6 million, Self Insurance reserves of \$6.7 million, Future Capital projects of \$76.0 million, drought related conservation and tap surcharges of \$2.1 million and Hayman Fire Repair Grants of \$535,000.

#### 2003 Budget

In an effort to help mitigate the impacts of the drought and fires, the 2003 Budget incorporates reductions to the capital plan of \$36.9 million. In addition, the 2003 Budget plans to maintain payroll expenditures at 2002 levels by delaying the filling of vacant positions and reducing overtime for savings of \$1.2 million and \$1.6 million, respectively. Additional reductions for materials and supplies, consulting work, postage, training, conferences and personal computer replacements and software total \$1.9 million.

#### **Receipts**

Denver Water's receipts for 2003 are budgeted to be \$234.9 million. Operating receipts are \$13.1 million less than for 2002 at \$133.1 million. These receipts are primarily composed of revenues from the sale of water and are approximately 57% of total receipts from all sources. The projected water sales revenue is based on expected drought conditions continuing from 2002. It reflects a 3.1% rate increase which takes effect January 1, 2003, and an anticipated 15% reduction in annual demand due to water restrictions in response to the drought.

Drought surcharges for 2003 are projected at \$11.0 million. Tap surcharges are budgeted at \$4.5 million.

System Development Charges (SDCs) are expected to total \$23.8 million in 2003, down \$12.8 million from actual 2002. SDC receipts for 2002 included a non-recurring \$5.0 million SDC payment from Cherry Creek Water and Sanitation District for system improvements related to their conversion to total service. The decrease is also due a conservative estimate of tap sales for 2003 given current economic conditions.

The 2003 Budget includes the \$1.9 million balance of the NRCS grant money from the US Department of Agriculture as well as the \$500,000 Section 319 grant from the EPA.

2003 will be the first year for Denver Water to issue revenue bonds. In the past, Denver Water relied on general obligation bonds. However, in November 2002, the City charter was changed to remove Denver Water's authority to issue general obligation bonds. Beginning in 2003, like most enterprises, Denver Water will issue revenue bonds. Total bond proceeds budgeted for 2003 are \$40.5 million, including \$31.5 million of new money and \$9.0 million for refunding currently outstanding general obligation bonds with revenue bonds.

Income from investments budgeted for 2003 is \$4.5 million, down \$3.9 million from 2002 as only interest payments are budgeted. No attempt is made to project unrealized changes that may occur in the market value of the long term portfolio.

#### Operation and Maintenance

Operation and Maintenance expenditures for 2003 are budgeted at \$97.0 million, \$1.5 million (1.6%) more than actually spent in 2002. Included in the 2003 Budget are \$2.7 million for drought response, \$2.9 million for rebates to customers for purchases of water saving low volume toilets and clothes washing machines, \$398,000 for Hayman fire related repair work at Cheesman Reservoir, hiring of new employees and a budgeted wage and salary increase.

#### Capital Expenditures

The 2003 Capital Expenditure budget is \$123.5 million, \$3.7 million more than Denver Water spent in 2002. The increase is a result of continued construction of the new Recycled Water Project (\$23.4 million more than in 2002), offset by the winding down of construction for Marston Treatment Plant improvements (\$7.1 million less than in 2002), Transmission and Distribution system replacements and improvements (\$5.1 million less than in 2002) and completion of Foothills Treatment Pant Disinfection improvements in 2002 (\$5.9 million).

Major 2003 capital projects include construction of the Recycling Plant and Distribution System of \$53.9 million, additions and improvements to Marston Treatment Plant of \$10.7 million, Automated Meter Reading project of \$11.0 million and new GIS and other computer systems of \$7.3 million. Drought response related capital construction for 2003 totals \$5.1 million. Hayman fire related construction of sedimentation dams to control the flow of sedimentation into Cheesman Reservoir is budgeted at \$1.7 million.

#### Number of Employees

The net number of authorized regular full-time employees is projected to increase by 25 (2.3%) to 1,087 in 2003. Fifteen new positions are being added to the Operations and Maintenance Division to provide additional staffing for the new Recycling Plant, expected to be operational in 2004. Seven positions will be added to the Water Quality, Environmental Compliance, Emergency Service and Instrumentation and Control Systems areas. The Public Affairs Division will add one new Administrative Assistant in Sales Administration and four customer service positions. Four meter reading positions will be deleted as a result of the Automated Meter Reading Project. The Engineering Division will add a Manager of Geospational Information Technology and the Planning Division will add one new Planner.

#### Payroll and Benefits

Budgeted payroll for 2003 is \$59.1 million, an increase of only \$12,000 more than the actual for 2002. The budget includes hiring new employees, filling vacant positions, and the budgeted wage increase average of 2.0%. The small difference was achieved by requiring an additional mandatory vacancy savings of 2.0% in addition to the initial budgeted vacancy savings of 3.9%. The additional delay in replacing existing positions and deferring the hiring of new positions is expected to result in a \$1.2 million reduction in payroll.

Employee benefit plan costs are budgeted at \$23.9 million for 2003, an increase of \$1.6 million (7.3%) from 2002. The Board's payment for the defined benefit retirement plan is expected to be \$1.3 million more than actual payments in 2002 based on a continued expectation of lower stock market returns and other actuarial projections. Health insurance costs are expected to increase by \$763,000 million due to rising medical costs. These increases are partially offset by anticipated decreases in Workers Compensation of \$276,000 and Life Insurance of \$160,000.

#### **Debt Service**

Debt Service costs for 2003 are budgeted at \$33.6 million including principal, interest and related costs.

#### **Designated Balance**

The Designated Ending Balance for 2003 is estimated to decrease by \$19.2 million to \$137.3 million. This reduction is substantially due to planned uses of the funds for capital projects, fire and drought related projects and activities and an expected \$13.1 million less for water sales to customers due to continued drought related restrictions.

The 2003 Designated Ending Balance is allocated as follows: Operation and Maintenance in the amount of \$29.1 million, Non-Expansion Capital in the amount of \$13.6 million, Debt Service reserves of \$41.8 million, Self Insurance reserves of \$6.9 million, Future Capital projects of \$27.9 million, drought related conservation and tap surcharges of \$15.6 million and Hayman Fire Repair Grants of \$2.4 million.

#### **Financial Overview**

Denver Water's financial status is strong and is projected to continue to be so over our planning horizon of 10 years. Moody's, Fitch Ratings, and Standard and Poor's rate our general obligation bonds Aa1, AA+, and AA+, respectively. We will continue to monitor capital expenditures, water rates, debt levels, and designated balances to minimize rate increases or unanticipated large fluctuations in water rates. Designated balances are projected to meet or exceed targeted levels. Over the next 10 years, financial indicators for Denver Water are projected to remain strong and within conservative and prudent limits.

I am confident, as outlined in this letter, that this budget provides a responsible plan for physical and financial operations and the development of the Denver Water system in the next year.

Sincerely,

H. J. Barry Manager

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#### Mission, Values and Goals of Denver Water

#### **Charter Directives**

Denver Water was established in 1918 by the people of Denver as an independent agency with duties and responsibilities specifically spelled out in the City Charter. Since that time, the Denver Board of Water Commissioners has supplied water to Denver and contract distributors adjacent to Denver in accordance with the following charter directives: (See service area map on page 27).

The Board shall "... have complete charge and control of a water works system and plant for supplying the City and County of Denver and its inhabitants with water for all uses and purposes." Charter of the City and County of Denver, Section 10.1.1.

The Board shall fix rates which ".... shall be as low as good service will permit .. "and" .. may be sufficient to pay for operation, maintenance, reserves, debt service, additions, extensions, betterments, including those reasonably required for the anticipated growth of the Denver Metropolitan area and to provide for Denver's general welfare." Charter of the City and County of Denver, Section 10.1.9.

#### **Mission**

Denver Water will provide our customers with high quality water and excellent service through responsible and creative stewardship of the assets we manage. We will do this with a productive and diverse work force. We will actively participate in and be a responsible member of the water community.

#### **Organizational Values**

Our values describe the guiding principles and beliefs governing how all employees of Denver Water are expected to meet their responsibilities in carrying out the mission of the organization. These values provide the framework for effectively reaching decisions and guiding future actions within the Department.

- •We exist for the purpose of serving our customers.
- •We value our heritage of providing a high quality product and excellent service at a reasonable cost.
- •We strive to be responsible and accountable stewards in our use of public land and water, and environmental and financial resources.
- •We value a work force that reflects the diversity of the community we serve.
- •We expect accountability from Management in accomplishing the goals of the organization.
- •We manage water supply based on a long-term perspective on water issues.
- •We strive to show respect and courtesy in our relationships with others.
- •We want to be progressive, creative and open to new ideas and technologies to meet the challenges of the future.
- •We value the safety of our customers and the public.
- •We promote the highest level of health and safety for our employees.
- •We value our employees and enlist their contributions in operating, planning and policy matters.
- •We encourage employees' management of their career development.

#### **Strategic Plan Vision for 2005**

The Strategic Plan is the basis for setting priorities and determining Denver Water's future direction. The current Strategic Plan was revised in the spring of 1997.

#### Leadership

- •We will maintain the Denver Water system as one of the best in the country.
- •We will respect the natural environment.
- •We will be a leader in water conservation.
- •We will participate and provide leadership in all major Front Range water supply and water quality issues.
- •We will encourage and create cooperative projects with others.
- •We will possess credibility and influence with public, regulatory community, media and decision-makers at all levels of government.

#### **Products & Services**

- •We will provide drinking water that is always safe and meets our customers' expectations of quality and reliability.
- •Our customers will be pleased with our service, responsiveness and courtesy.
- •Our customers will believe that they receive high value for the cost of their water.
- •Our facilities will be well-maintained, running efficiently and reliably.
- •We will provide non-potable water for irrigation and industrial purposes.
- •We will take increasing advantage of technology to meet our goals.
- •We will anticipate new markets in order to provide ancillary products and services.
- •We will accommodate the recreational interests of the public, where practicable.

#### Organization

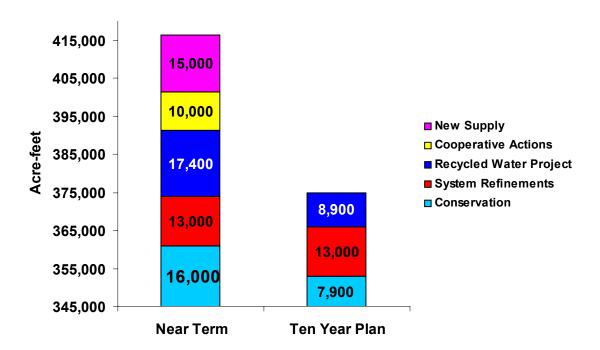
- •We will recognize and value the contributions of employees at every level.
- •We will remain a municipal organization that serves an increasing customer base without significant increases in numbers of employees.
- •Our Management and Staff will be worthy of the Board's trust and confidence.
- •Our entire organization will work diligently as a team, committed to the goals of the organization.
- •Our organizational culture will encourage open communication, creativity, risk taking and learning at all levels for the continual improvement of our products and services.
- •Our organization will accommodate a changing work force, including differing technological skills, languages, backgrounds and family demands.
- •Our employees and distributors will take pride in the professionalism of Denver Water.
- •We will emphasize the safety and health of employees.
- •All of our employees will be familiar with events and procedures at Denver Water and will be able to explain them to others.
- •All of our employees will possess the skills and accept the responsibility to manage their own careers.

#### **Integrated Resource Plan**

In addition to meeting existing customers' needs today, Denver Water must also plan for and meet future customer needs. For that reason, Denver Water conducts a continual and dynamic Integrated Resource Planning (IRP) process. Based on that process, the Board issued a Resource Statement in 1996 to define how Denver Water expects to meet future customers' needs. In 2001, Denver Water staff provided the Board with a status report on staff's efforts to implement the 1996 Resource Statement.

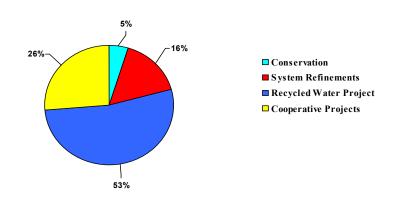
Results of the IRP indicate that additional water supply, water reuse, and/or demand management will be required after 2016. By 2050, Denver Water will need an additional 75,000 acre-feet of water over existing supplies to meet customer demand assuming the Board maintains the full 30,000 acre feet of safety factor. The Board's Resource Statement mapped out a near term strategy that emphasizes aggressive conservation, non-potable reuse, and low cost system refinements as the first means of meeting demand beyond 2016. The initial implementation of that strategy is expressed in the Board's current Ten-Year Program as presented below.

#### **NEAR TERM vs. TEN YEAR PLAN**

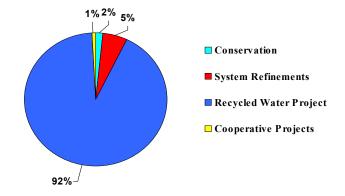


The continuity of 2003 Annual Budget expenditures with the Ten Year IRP implementation Plan is presented below

## IRP PROJECTS IN TEN-YEAR PROGRAM 2003-2012



#### IRP PROJECTS IN THE 2003 BUDGET



## Integrated Resource Plan Projects (Thousands of Dollars)

The table below presents 2003 Annual Budget, Ten-Year Program, and total planned expenditures by specific IRP categories and projects.

IRP Projects	2003	Ten-Year	Total	Estimated
(Listed in IRP order*)	Budget	Program	Project	Additional
		Costs	Cost	Water Yield
		(2003-2012)		(Acre-Feet)
CONSERVATION				
Outdoor Irrigation Efficiency	492	5,087	48,200	17,700
Xeriscape – General	306	1,840	482	926
Xeriscape – DW Properties	27	2,400	672	28
Indoor Use (C/I Processes, Cooling Twrs., Washers)	233	1,680	20,575	13,750
Subtotal	1,058	11,007	69,929	32,404
RECYCLED WATER PROJECT				
Recycled Water Project	53,928	122,400	164,000	17,660
SYSTEM REFINEMENTS				
Gravel Pit Storage	1,470	21,160	51,000	5,000
Central Platte Valley Parks	0	2,900	4,500	**
High Line Canal Water Rights	101	2,720	2,720	3,000
City Ditch Water Rights	10	400	300	**
Stontia Fish Flow Recovery Pump Station	1,160	10	5,200	2,000
Lawn Irrigation Return Flows	434	1,640	2,300	500
Farnell Lane Water Rights	9	10	200	150
Meadow Creek Water Rights	0	3,330	9,000	1,200
Antero Contract Rights	10	460	3,000	414
Elk Creek Water Rights	2	10	200	60
Platte Canyon Reservoir Outlet	0	610	600	200
Marston Seepage	0	0	310	400
Willis Case Golf Course & Rocky Mtn. Park	0	3,630	3,800	305
Subtotal	3,196	36,880	83,130	13,229
NEW SUPPLY AND COOPERATIVE PROJECTS				
Cooperative Project Southern Tier	48	60	Unknown	Unknown
Cooperative Project Northwest Tier	126	60	Unknown	Unknown
Cooperative Project Northeast Tier	0	0	Unknown	Unknown
Cooperative Project w/Aurora (Antero or 11Mile)	67	630	Unknown	Unknown
N. End Supply Shortage Solution (Leyden or Other)	176	60,000	Unknown	Unknown
Subtotal	417	60,750	Unknown	Unknown

GRAND TOTAL 58,599 231,037 Unknown Unknown

<sup>\*</sup>Please note – the projects are categorized as they appear in the IRP and not as they are classified in the 2003 budget document.

<sup>\*\*</sup>Yields are included in the Recycled Water Project Yield.

#### **Financial Policies**

The financial policies set forth below are the basic framework for the financial management of Denver Water. The policies are intended to assist members of the Denver Board of Water Commissioners (Board) and Denver Water's staff in evaluating current activities and proposals for future programs. The policies are to be reviewed on an annual basis and modified to accommodate changing circumstances or conditions.

#### **Basis of Accounting and Financial Reporting**

- 1. Denver Water shall prepare its financial reports in accordance with generally accepted accounting principles as established by the Governmental Accounting Standards Board.
- 2. The fiscal year for Denver Water shall begin on January 1 of each calendar year and will end on December 31 of the same calendar year.
- 3. Following the conclusion of the fiscal year, the Accounting section shall publish a Comprehensive Annual Financial Report (CAFR) prepared in accordance with generally accepted accounting and financial reporting principles established by the Governmental Accounting Standards Board.
- 4. The CAFR shall include the audited financial statements, including the opinion of the independent certified public accountants.
- 5. The Accounting section shall, each quarter, analyze and issue quarterly reports comparing financial results for the quarter and year to date with the same periods for the prior years.

#### **Annual Budget**

- 1. Denver Water's Manager and Staff will prepare the annual budget in the context of a long-term financial plan.
- 2. The Board shall, at its option, appoint one or more of its members to a budget review committee to meet with the Manager and Directors to review and provide guidance for the Long Range Plans and Annual Budget.
- 3. The Fiscal Planning and Performance (FP&P) Section, prior to the end of December each year, shall submit to the Board the annual budget covering the next fiscal year. The budget shall contain the following information:
  - a. A letter from the Manager discussing the proposed financial plan for the next fiscal year, a review of the previous year's activities and the current financial condition of Denver Water.
  - b. Proposed capital, operations and maintenance and debt service expenditures by program and type of expenditure for the budget year, along with comparisons to estimated expenditures for the current year and actual expenditures for two prior years.
  - c. Proposed receipts, by source, for the budget year, along with comparisons to estimated receipts for the current year and actual receipts for three prior years.
  - d. Debt service policies and a comparison of actual ratios to target ratios.
  - e. A table of organization with proposed staffing levels by division and section, along with comparisons to staffing levels for the current year.
  - f. A summary of designated balances for system operations normal replacements and improvements, debt service, self-insurance and future capital projects.
- 4. At least one public Board meeting shall be conducted prior to adoption of the budget.

- 5. The Board shall review the budget, making any additions or deletions they feel appropriate, and shall, prior to the end of the year, adopt the budget by quorum. If the Board fails to adopt the budget, Denver Water shall continue to operate with specific instructions from the Board regarding debt service, system operations and capital expenditures.
- 6. On final adoption, the budget shall be in effect for the budget year. It shall guide the activities of the Manager and Staff for the budget year.
- 7. .The annual budget document shall be published in conformance with the Government Finance Officers Association's Distinguished Budget Program criteria. The final budget document shall be published no later than 90 days following the date the Board adopts the budget.
- 8. The Fiscal Planning and Performance section shall monitor actual receipts and expenditures and shall compare them to budgeted receipts and expenditures on a monthly basis. The Fiscal Planning and Performance section shall report variances from budgeted receipts and expenditures for the month and year to date to the Board and to the Manager and Staff.

#### **Revenues and Expenditures**

- 1. Denver Water will set fees at a level that recovers the projected full cost of providing service pursuant to the City Charter.
- 2. In planning expenditures, Denver Water will follow the City Charter's mandate to keep rates as low as good service will permit. In general this means that Denver Water will maintain its facilities and continuously seek ways to operate more efficiently.

#### **Debt Service**

Debt Service policies are provided in Section 6 Debt Service, beginning on page 87.

#### **Long Term Financial Plans**

- 1. Denver Water's Manager and Staff shall annually prepare a capital project plan that shall identify all capital improvements likely to be needed during the next ten years to satisfy projected growth in demand for water and to maintain existing capacity to provide water.
- 2. Each year the Manager and Staff will propose a ten-year Operations and Maintenance Plan that shall identify expenses for normal operations, including significant changes to current operations and expenses arising out of planned capital projects.
- 3. Each year Denver Water will develop a ten-year Financial Plan that which incorporates projected revenues and expenditures included in the capital and O&M plans. The ten-year Financial Plan shall be used to develop one or more scenarios for financing projected expenditures.
- 4. The long-term plan will incorporate the Manager and Staff's assumptions with respect to revenues, expenditures and changes to designated balances over a ten-year horizon. The assumptions will be evaluated each year as part of the long-range planning and budget development process.

#### **The Budget Process**

#### Overview

The highest policy level includes the Strategic Plan and the Integrated Resource Plan. The Strategic Plan provides the overall mission, values and goals (see pages 1 - 2). The Integrated Resource Plan provides specific operational policies regarding future water demand and supply options. A summary of these policies is on pages 3 - 5. The long-range plans are the financial expressions of these governing factors over a ten-year period. The annual budget is the definition of needs and allocations of available resources to accomplish the next year of the long-range plans.

#### Long Range Planning

Denver Water maintains long-range (10 years) capital, operation and maintenance and financial plans that are updated annually. The capital plan projects additions, improvements and replacements to water system facilities, based on projected demands for water (Integrated Resource Plan), Federal and State regulations and ongoing system requirements. It is used as the basis for projecting the Capital Work Plan budget. The Operation and Maintenance Work Plan includes the ongoing costs of operating and maintaining the water system and the impact of the Capital Work Plan on operations. The financial plan projects the year-end total designated balances. These balances result from the application of projected receipt sources available for projected capital, operation and maintenance and debt service expenditures. Alternative financial plans that address estimated revenue shortfalls are also projected as a part of the long range planning effort.

#### **Annual Work Plan Budgets**

The detailed annual work-plan budgets for operation and maintenance activities, debt service and capital projects are developed during the budget process each year. These budgets are substantially based on the budget year projections provided by the Long-range plans. These work plans itemize the cost of activities and projects within each program (See page 49 for description of programs).

#### **Annual Budget Preparation**

The annual budget is prepared on a program budget basis that follows the flow of water from the sources of raw water to customers' taps and cuts across organizational boundaries. The focus is first on what Denver Water as a whole is doing (what our resources are used for), then on organizational structure (the divisions and sections expending the resources), and then by type of expenditures (what types of resources – payroll, services, etc., are being used). The intent of this particular format is to facilitate the reader's understanding of how we are accomplishing our mission to serve our customers needs in the past, present and future.

All Cost Control Centers prepare their budgets on a capital project, operations and maintenance activity by type of expenditure by month basis. Budget development, monitoring and control reports are then available to budgeters and managers from project, Cost Control Center, and type of expenditure perspectives at summary and detail levels. The 2003 annual Capital Work Plan budget consists of 236 specific projects. The 2003 Operation and Maintenance Work Plan budget includes 174 specific activities. While some Cost Control Centers may budget to as few as four or five projects and activities, others may budget to 50 or more. This method provides the detailed "working" budget and reporting mechanism for in-house purposes.

Cost Control Centers enter their budgets into a centralized computer system. This system is able to provide budget and actual information for combinations of cost control center, master plan item (projects and activities) and types of expenditures for any month or year to date of months.

The Cost Control Center budgets are then combined to collect costs on a department-wide basis for each of the projects and activities in the work plans. The information contained in the work plans and Cost Control Center budgets is summarized in this document.

#### **Budget Basis**

The annual budget is prepared on a modified accrual basis in which expenditures are reported and budgeted "as booked." The difference between expenditures "as booked" and disbursed is then included in Supporting Activities (Operation and Maintenance) as an adjustment. The adjustment converts the budgeted expenditures to a cash basis in order to determine the ending total of designated balances for system operation and land sales account amounts for presentation purposes. This differs from the basis of accounting, which uses the full accrual method in accordance with the Generally Accepted Accounting Principles (GAAP).

#### **Budget Schedule**

The 2003 budget development schedule on page 10 shows the process from the Integrated Resource Plan to Long Range Planning process to development of the annual budget and resulting budget approval by the Board of Water Commissioners.

#### **Budgeting Units**

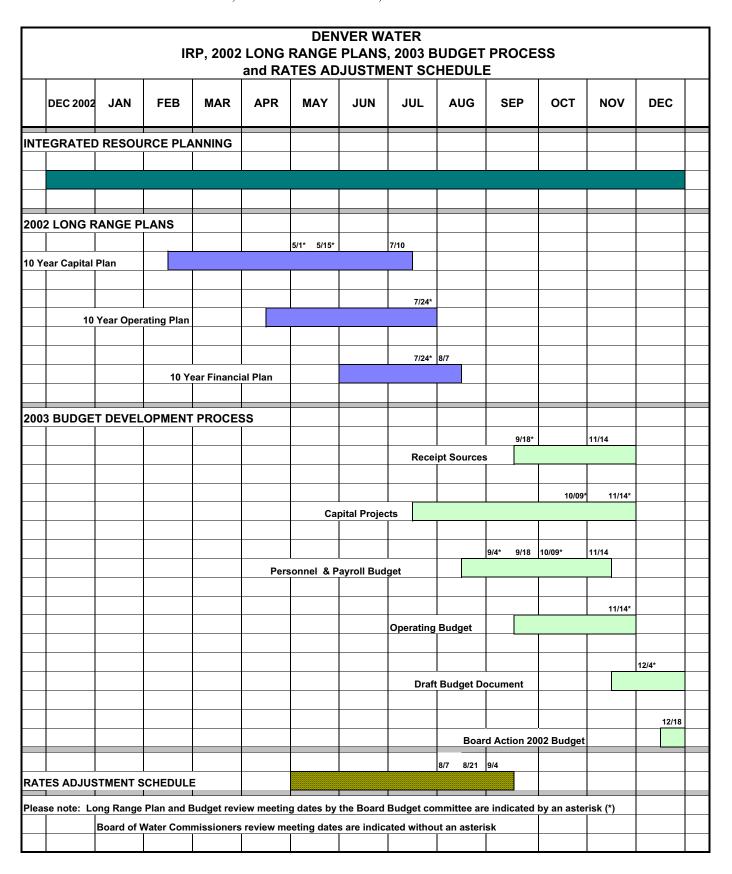
Denver Water is divided into six operating divisions totaling 88 budgeting units or cost control centers. Seventy-nine of these cost control centers are comprised of groups of employees based on organizational structure. The remaining 9 are used to budget, control office furniture and equipment, personal computers, related expenditures and adjustments.

#### Amending the Budget

Amounts budgeted for specific projects and activities may be revised through the issuance of a special authorization. A special authorization request showing the budget code, cost control center(s) involved, reason for variance, amount of variance, revised estimate and schedule is prepared by the requesting Division. It is then approved by that Division Director and, if needed, the Manager, who will determine if Board approval is also required.

#### **Budget Presentation and Approval**

Denver Water is not required by City Charter or state law to make its draft budget available to the public prior to its adoption by the Board of Water Commissioners. The preliminary 2003 budget is reviewed by the Board's Budget Committee, presented in summary at one or more public Board meetings and presented in draft to the entire Board prior to its approval.



#### **Distinguished Budget Presentation Award**



The Government Finance Officers Association of the United States and Canada (GFOA) presented an Award of Distinguished Budget Presentation to Denver Water for its annual budget for the fiscal year beginning January 1, 2002.

In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan and as a communications device.

The award is valid for a period of one year only. We believe our current budget continues to conform to program requirements, and we are submitting it to GFOA to determine its eligibility for another award.

#### **Budget Controls and Updates**

Periodic reports are provided to the Board of Water Commissioners, Manager, Division Directors, Cost Center Managers and Budget Coordinators. Key reports include:

<u>Monthly Budget Status Summary</u> - Provided to the Board, Manager and Division Directors. Compares receipts to related capital and operating expenditures for the year-to-date are additionally broken down by type of expenditure. Budgeted and actual billed revenues are graphically compared to receipts from Water Sales by month-end and year to date.

Monthly Budget Status Report - Provides the Manager and Division Directors with graphs and summary tabulations of actual and budgeted receipts and expenditures for the month and year to date. Also included are explanations of major receipt, expenditure and designated balance variances and graphs showing each Division's budget performance. Divisional Budget Coordinators also receive this information plus a detailed Receipt and Expenditure Budget report and a Gross Payroll Budget report by Division and Cost Center.

<u>Monthly Cost Control Center Budget Report</u> - Each Cost Control Center is provided with a comparison of month and year-to-date actual and budgeted expenditures by type of expenditure (Payroll, Materials, etc). Annual budget amounts are also shown for comparative purposes.

<u>Monthly Cost Control Center by Master Plan Item Report</u> - This is a summary level report. Focus is on the capital projects and operation and maintenance activities that a cost center has budgeted and/or charged during the year.

<u>Monthly Budget Variance Explanation Report</u> - Each month, cost centers are required to explain significant variances between budgeted and actual expenditures.

<u>Intranet Expenditures Budget Reports</u> – Flexible budget reporting is available to all budgeters through the Intranet. Budgeters are able to make budget to actual comparisons for projects, cost control centers and type of expenditure combination "drill-down" to detail levels to obtain additional details as desired.

<u>Additional Reporting</u> – Additional reports can be created by the budgeters in the format and levels of detail required from the budget system.

#### **Financial Structure**

Denver Water is limited by City Charter to have only one fund, the Water Works Fund, for all of its receipts and expenditures. The balance of the Water Works Fund is referred to in this budget document as the Designated Balance.

The Chart of Accounts utilized by Denver Water generally follows the structure presented by the National Association of Regulatory Utility Commissioners for Class A Water Utilities. The accounting system adheres to standards set by the Governmental Accounting Standards Board (GASB) and is audited annually by an independent CPA firm.

The Water Works system is completely funded through rates, fees and charges for services provided by Denver Water. Although Denver Water is an enterprise fund, there are no transfers to or from the general fund of the City and County of Denver.

Water rates pay for operation and maintenance expenses, repair and capital replacements and modifications to existing facilities, debt service principal and interest. Capital expenditures for new facilities and water supply are generally funded from other non-rate sources of funds: System Development Charges, and front-end participation from developers, and reimbursements.

#### How to Read the 2003 Budget

#### From Summary to Detail

The 2003 Budget is arranged for easy reference. An overall summary is provided at the beginning of the budget. Summary level information is also presented at the beginning of each section within the budget document. Additionally, the narratives include references to related information found elsewhere in the document.

#### Components

Furthermore, each section of this budget booklet describes a particular component of the budget, as follows:

<u>For summary overview of the entire 2003 Budget</u> - Read Section One. This section provides an overview of 2003 budgeted receipts, expenditures, designated balances and number of employees. It also includes a brief history of Denver Water and maps showing the area it serves and location of major facilities.

For receipt forecasts - Read Section Two. This section provides information on all types of receipts.

<u>For expenditures by program</u> - Read Section Three. This section categorizes expenditures by program. Each major component of the process of providing water to our customers; raw water, reuse of water, treatment, delivery to customers, and general operations, are considered as programs. Each program is then further broken down into operation and maintenance and capital components. This format allows evaluation of the cost of each component of providing water from source to customer. Down to detailed operation and maintenance activities and capital projects. It indicates why (for what activity or project) the expenditures are made. Information on both operation and maintenance activities as well as capital improvement and replacement projects is also provided.

<u>For expenditure by type</u> - Read Section Four. This section classifies total expenditures according to what was purchased, without regard to the activity or whether the expenditure was operation and maintenance or capital in nature. This section has information on the expenditures for labor, purchases of materials, services, equipment, construction contract payments, debt service and refunds.

<u>For information on Denver Water's organizational structure and performance measures - Read Section Five.</u> This section shows detailed number of employees, table of organization, activities by division and key performance measures for the organization.

<u>For information on debt service -</u> Read Section Six. This section includes Denver Water's debt policy, debt service schedules and description of Certificate of Participation projects.

<u>For information on cash flow</u> - Read Section Seven. This section shows the impact of the 2003 budgeted receipts and expenditures on the designated balances and describes how these balances are to be used.

<u>For terms used in the budget document</u> - Read Section Eight. This section contains a glossary of terms.



Colorado's ongoing drought provided optimum conditions for the fires that raged through state forests in the summer of 2002. Dry conditions -- and the drought -- are expected to continue in 2003, a prediction of another challenging summer for property owners, water providers and state and federal forest services.

#### Section 1 - 2003 Budget Summary

#### 2003 Beginning Balance

The 2003 Budget begins with a projected designated balance totaling \$156,540,000. For a detailed breakdown of this amount, see page 93.

#### **Receipts**

Total receipts for 2003 are projected to be \$234,907,000, including \$133,065,000 from the sale of water. Severe drought conditions experienced during 2002 are expected to continue during 2003. As a result, 2003 budgeted receipts from the sale of water are approximately \$22.0 million less than would have been expected if 2003 were projected as a drought year.

A drought surcharge to encourage customers to reduce water consumption, conserve available water supplies and work as an enforcement mechanism for other drought restrictions was implemented in 2002. The drought surcharge for 2003 is budgeted at \$11,043,000. A tap surcharge was also implemented in 2002 to help offset the costs of a customer rebate program for purchases of water saving toilets and washing machines and other conservation related activities. The tap surcharge budgeted for 2003 is \$4,538,000.

Non-operating, interest, hydropower and other receipts total \$16,740,000. Receipts used for the construction of new facilities include \$2,115,000 for participation receipts (front-end payments to the Board for capacity in specific groups of customers) and \$23,783,000 for System Development Charge receipts (tap fees).

Reimbursements and Grants total \$3,123,000. Hayman fire related grants from the U.S. Department of Agriculture (NRCS) and Environmental Protection Agency (section 319) are budgeted at \$1,883,000 and \$500,000 respectively. Proceeds from the Board's annual General Obligation Debt refunding program and new revenue bonds are expected to total \$40,500,000.

#### **Expenditures**

Total 2003 expenditures are budgeted at \$254,101,000. Operation and maintenance expenditures are budgeted to be \$97,006,000. Capital expenditures are budgeted at \$123,465,000. Debt Service and related costs are budgeted to be \$33,630,000.

Major capital projects include engineering and construction for the new Recycled Water Plant and Delivery System of \$53.9 million, additions and improvements to Marston treatment plant needed to meet Federal and State regulations of \$10.7 million, Automated Meter Reading program, of \$10.9 million, Winter Park Headquarters relocation of \$2.6 million, Gross Reservoir Outlet Gates \$2.3 million, transmission and distribution mains, fire hydrant improvements and replacements of \$5.4 million, new conduit construction of \$2.4 million and new financial, GIS and other computer systems and equipment of \$7.3 million.

Budgeted operation and maintenance and capital expenditures have been categorized into programs that reflect the major areas of activity in which Denver Water engages to accomplish its goals. Section 3, pages 49 through 66, provides a detailed breakdown of expenditures by program.

Expenditures have also been categorized by "type", i.e., a listing of what types of commodities will be purchased. Section 4, pages 67 through 70, provides a detailed breakdown of expenditures by type.

#### 2003 Ending Balance

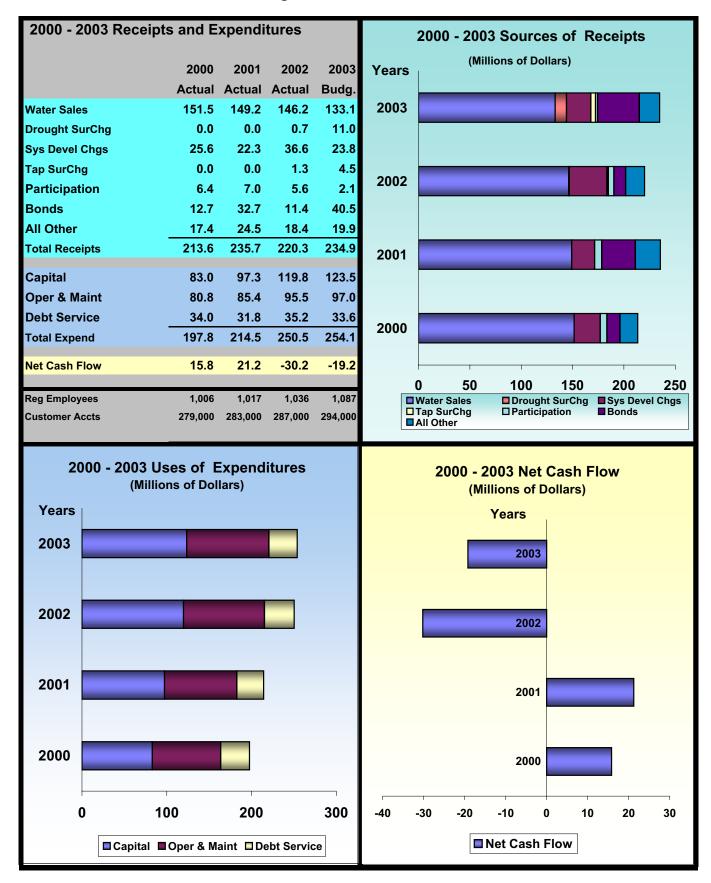
The 2003 budgeted expenditures of \$254,101,000 are \$19,194,000 more than projected receipts of \$234,907,000 resulting in ending designated balances totaling \$137,346,000. The designated balances for system operations and capital is maintained to cover a portion of: (1) operation and maintenance, (2) non-expansion capital, (3) debt service, (4) self-insurance, (5) future capital projects, (6)Temporary drought and tap surcharges to encourage water conservation during drought conditions and (7) Grants to help mitigate the costs of repairing fire damage around Cheesman Reservoir. For more details, see Section 7, Designated Balance Summary.

#### 2003 Number of Employees

The 2003 proposed regular and introductory number of employees of 1,087.1 is 24.7 more than authorized for 2002. The Engineering Division is adding a new manager of Geospatial I.T. and the Planning Division is adding one new planner. The Operation and Maintenance Division is adding 21 new positions, 15 of which are related to the new Recycled Water Plant. Three existing administrative positions related to the Locates program have been transferred from the Public Affairs Division. Four meter reading positions are being deleted in the Public Affairs Division as a result of the Automated Meter Reading Project. Three additional customer service positions are being added. A comparison of 2000 through 2002 actual, 2002 budget and budgeted 2003 regular and introductory employees by division are shown on page 71. Additional information by Division is available on pages 76-83. A summarized organization chart that shows reporting relationships is on page 75.

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#### The Budget at a Glance 2000 - 2003



## Summary Comparison of Receipts and Expenditures 2002 - 2003

	_	2002 Budget	_	2002 Actual	_	2003 Budget
Beginning Designated Balance Receipts from:	\$	186,755,000	\$	186,755,000	\$	156,540,000
Sale of Water	\$	148,785,000	\$	146,210,000	\$	133,065,000
Drought Surcharge		0		776,000		11,043,000
Non-Operating, Hydropower,						
Interest, & Other		12,111,000		16,480,000		16,740,000
System Development Charges		27,446,000		36,644,000		23,783,000
Tap Surcharge		0		1,333,000		4,538,000
Participation		3,918,000		5,573,000		2,115,000
Reimbursements		152,000		1,881,000		3,123,000
Subtotal	\$	192,412,000	\$	208,897,000	\$	194,407,000
Sale of Bonds	_	27,395,000	_	11,393,000	_	40,500,000
Total Receipts	\$_	219,807,000	\$_	220,290,000	\$_	234,907,000
Less Expenditures for:						
Operation & Maintenance Programs:						
Raw Water	\$	13,781,000	\$	17,550,000	\$	14,080,000
Recycled Water		541,000		300,000		1,746,000
Water Treatment		18,494,000		18,083,000		18,170,000
Delivery		46,292,000		44,462,000		50,454,000
General Plant		12,189,000		15,058,000		12,556,000
Total Operation &	-		_		_	· · · · · · · · · · · · · · · · · · ·
Maintenance Expenditures	\$	91,297,000	\$	95,453,000	\$	97,006,000
Capital Programs:						
Raw Water	\$	21,484,000	\$	15,341,000	\$	18,371,000
Recycled Water		28,796,000		31,467,000		54,898,000
Water Treatment		26,157,000		27,330,000		14,682,000
Delivery		31,728,000		30,724,000		32,177,000
General Plant		17,363,000		14,932,000		11,337,000
Historical Timing Adjustment		(11,956,000)		0		(8,000,000)
Total Capital Expenditures	\$	113,572,000	\$	119,794,000	\$	123,465,000
Debt Service and Related Costs	\$	32,712,000	\$	35,258,000	\$	33,630,000
Total Expenditures	\$	237,581,000	\$	250,505,000	\$	254,101,000
Ending Designated Balance	\$_	168,981,000	\$ _	156,540,000	\$_	137,346,000

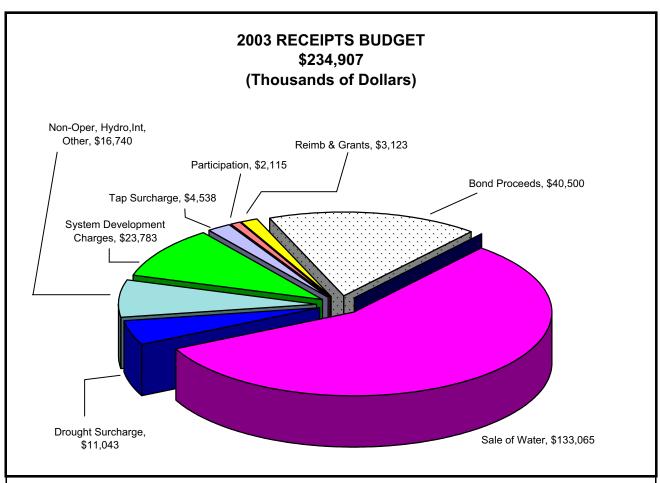
## Crosswalk of 2003 Budgeted Receipts to Related Capital and Operating Expenditures by Type of Expenditure Sources and Uses (Thousands of Dollars)

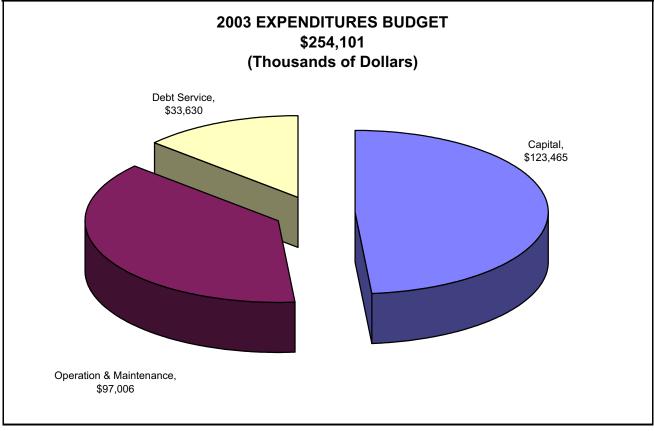
				Capital							Total
		Oper & Maint		Repl, Mod & Equip		New Add, Impv	Total Capital		Debt Service		2003 Budget
SOURCES:	_		-				•			_	
Receipts:											
Operating	\$	68,523	\$	22,990	\$	16,922 \$	39,912	\$	24,630	\$	133,065
Drought Surcharge		11,043		0		0	0		0		11,043
Non-Operating		2,811		0		0	0		0		2,811
Hydropower		988		0		0	0		0		988
Systems Development Charges		0		0		23,783	23,783		0		23,783
Tap Surcharge		4,538		0		0	0		0		4,538
Participation		0		0		2,115	2,115		0		2,115
Reimbursements & Grants:											
NRCS Grant		1,393		0		490	490		0		1,883
EPA Grant		500		0		0	0		0		500
Other Reimbursements		740		0		0	0		0		740
Interest on Investments		2,243		0		2,243	2,243		0		4,486
Other		4,227		4,228		0	4,228		0		8,455
Subtotal Receipts	\$	97,006	\$	27,218	\$	45,553 \$	72,771	\$	24,630	\$	194,407
Bond Proceeds:											
G.O. Bond Refunding		0		0		0	0		9,000		9,000
New Revenue Bond Proceeds	_	0		0		31,500	31,500		0	_	31,500
Total Receipts	\$	97,006	\$	27,218	\$	77,053 \$	104,271	\$	33,630	\$	234,907
Designated Balance	_	0		0		19,194	19,194		0	_	19,194
Total Sources	\$_	97,006	\$	27,218	\$	96,247 \$	123,465	\$	33,630	\$_	254,101
USES:											
Expenditures:											
Gross Payroll	\$	49,762	\$	5,058	\$	4,315 \$	9,373	\$	0	\$	59,135
Employee Benefits		23,926		0		0	0		0		23,926
Materials and Supplies		9,029		3,173		9,254	12,427		0		21,456
Utilities & Pumping Power		4,262		0		0	0		0		4,262
Professional Services		5,065		645		4,142	4,787		182		10,034
Other Services		11,880		5,808		2,708	8,516		43		20,439
General Equipment		0		1,952		0	1,952		0		1,952
Construction Contract Payments		236		9,534		73,853	83,387		0		83,623
Refunds		343		0		0	0		0		343
Debt Service		0		0		0	0		33,405		33,405
Other		3,526		(4,956)	)	(3,044)	(8,000)	)	0		(4,474)
Total Expenditures	\$	108,029	\$	21,214	\$	91,228 \$	112,442	\$	33,630	\$	254,101
Distribution of Supporting Activities (1)	_	(11,023)		6,004		5,019	11,023		0	_	0
Total Uses	\$_	97,006	\$	27,218	\$	96,247_\$	123,465	\$	33,630	\$_	254,101

<sup>(1)</sup> Supporting Activities are employee benefit, administrative and general expenditures that are not directly related to a specific capital project or operation and maintenance activity activity. These amounts are therefore allocated as indirect costs (overhead).

#### Crosswalk of 2003 Budgeted Receipts to Related Drought, Rebate, Fire and Normal Operations Sources and Uses (Thousands of Dollars)

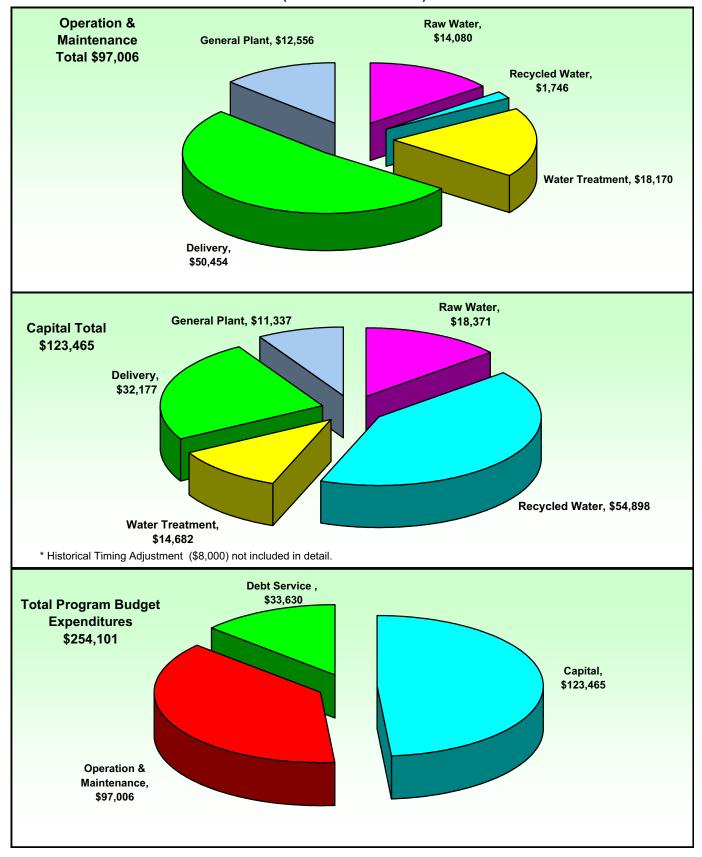
SOURCES:		Drought		Rebates		Fire		Normal Operations	Total 2003 Budget
Receipts:	_	Diougiit	_	Repates	_	1116	-	Operations	Duuget
Operating:	\$		\$		\$		\$	\$	
Sale of Water	•				•			132,727	132,727
Penalty Fees		338							338
Total Operating	_	338		0		0		132,727	133,065
Drought Surcharge	\$	9,300	\$		\$	1,743	\$	\$	11,043
Non-Operating								2,811	2,811
Hydropower								988	988
Systems Development Charges								23,783	23,783
Tap Surcharge				4,538					4,538
Participation Reimbursements & Grants:								2,115	2,115
NRCS Grant						1,883			1,883
EPA Grant						500			500
Other Reimbursements		100						640	740
Interest on Investments								4,486	4,486
Other								8,455	8,455
Subtotal Receipts	\$	9,738	\$	4,538	\$	4,126	\$	176,005 \$	194,407
Bond Proceeds:									
G.O. Bond Refunding								9,000	9,000
New Revenue Bond Proceeds	_						_	31,500	31,500
Total Bond Proceeds		0		0		0		40,500	40,500
Total Sources	\$_	9,738	\$_	4,538	\$_	4,126	\$_	216,505 \$	234,907
USES:									
O & M	\$	2,743	\$	2,962	\$	398	\$	90,903 \$	97,006
Capital		5,098				1,748		116,619	123,465
Debt Service								33,630	33,630
Total Uses	\$	7,841	\$	2,962	\$	2,146	\$	241,152 \$	254,101
Net 2003 Balance	\$_	1,897	- \$_	1,576	_ \$_	1,980	- \$_	(24,647) \$	(19,194)



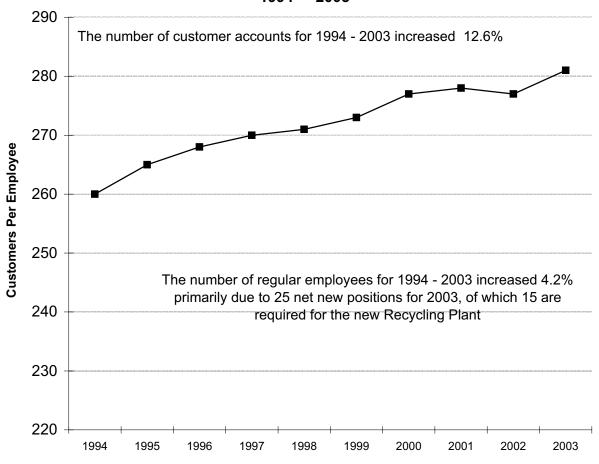


#### **2003 PROGRAM BUDGET**

(Thousands of Dollars)



## Customers Served Per Regular Employee 1994 - 2003



Years	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
40										
Employees <sup>(1)</sup>	1,003	989	989	990	1,002	1,003	1,006	1,017	1,036	1,046
Customers <sup>(2)</sup>	261,000	262,000	265,000	267,000	271,000	274,000	279,000	283,000	287,000	294,000
<b>Cust Per Empl</b>	260	265	268	270	271	273	277	278	277	281

<sup>&</sup>lt;sup>(1)</sup> The number of employees shown are reqular employees as of the end of each year. The 2003 projected number of regular employees reflects budgeted authorization of 1,087 proposed for 2003 <u>reduced</u> by anticipated vacancy savings of 3.6% based on historical trend.

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<sup>(2) 2003</sup> number of customers is based on projection from the 2002 rate study.

#### **Denver Water - A Condensed History**

After decades of watching warring private water companies struggle to bring drinking water to the City, often at exorbitant rates, Denver residents voted in 1918 to pass City Charter amendments creating the Denver Board of Water Commissioners. Concurrently, voters also approved purchase of the Denver Union Water Company, transforming it into a public agency whose mission remains providing healthy drinking water at a fair price.

Denver Union was the survivor of 11 private companies that attempted to supply water to the growing community at the foot of the Rockies. They ranged from the Capitol Hydraulic Company of 1860 - incorporated to dig a ditch from the South Platte River to Brown's Bluff, now the Capitol Hill section of Denver - to the wiley and powerful Denver Union Water Company, headed by such movers and shakers as Walter Scott Cheesman, David Moffat and E. S. Kassler.

Because Denver Union, and its owners, had been deeply involved in municipal politics, provisions of the 1918 charter amendments required the creation of a totally separate water works fund, out of reach of the City government. Conversely, the Water Board was to have no access to Denver's general funds. These provisions were intended to assure that the Water Board performs its sole task of supplying water to the inhabitants of Denver "for all uses and purposes and ...at the lowest rates good service will allow."

The charter also directs the water system to pay its own way through charges for water service and to earn enough for "betterments and improvements" to the system. Denver's pioneers had experienced the semi-arid nature of what early explorers had called "the Great American Desert" and wanted a "never failing" water supply, according to early newspaper accounts.

Only a few years after taking over the well-developed Denver Union system, the new five-member Water Board was faced with its first impending shortage of water. Population growth was rapidly transforming the City, and more water was needed. In 1924, Antero Reservoir, high in the South Park hay meadows near the headwaters of the South Platte River, was acquired by Denver Water to augment supply. In the late 1920s, just before onset of the Great Depression and Dust Bowl, the Water Board committed to build Eleven Mile Canyon Reservoir on the edge of South Park to assure supply. In the early 1930s, the Board made use of transmountain water rights by using the pilot bore of the famous Moffat Railroad Tunnel to send water to the drought-plagued city. Descriptions of the first flow of water through the tunnel were carried coast-to-coast by radio networks, and throngs of people took chartered trains to the east portal of the water tunnel to "cheer the water on to the city to end the drought." Later, Gross Reservoir was added to this system to store water from Moffat Tunnel.

The end of World War II brought yet another population boom to the Denver area, and the Water Board again was faced with a shortage of water to meet the needs of growth. Work had been started on the Roberts Tunnel under the Continental Divide to bring water to the city from the Blue and Snake Rivers and Ten-Mile Creek by way of the North Fork of the South Platte. A continuing debate over the size of the dam to build at Dillon to divert water into the tunnel was resolved in favor of a "high dam," thus creating Dillon Reservoir in 1963. It is Denver's largest single storage facility and one of the state's premier recreational attractions.

Modern treatment plants process water before sending it to customers' taps through a network of more than 2,500 miles of mains under city and suburban streets. The Foothills Treatment Plant, completed in 1983, is considered a state-of-the-art facility capable of producing more than 280 million gallons of treated water daily to meet customer demands on hot summer days. Foothills, built at an elevation that eliminates the need to pump water into the system and the attendant high costs, serves as the primary-plant throughout the year. The Marston Plant, on West Quincy Avenue, and the Moffat Plant, on West 20th Avenue, helps meet summer peak demands. Foothills and Marston are undergoing major renovations to help assure high water quality and make it possible to meet or exceed new national drinking water quality standards. Moffat has recently undergone similar upgrades.

Generation of clean hydroelectric power has become increasingly important to Denver Water. Hydro generators at Foothills, Strontia Springs Dam, Dillon Dam and at the east portal of the Roberts Tunnel were added in the mid-1980s to augment power generated at the department's Williams Fork Dam. Another generator was added in the mid-1990s at the Hillcrest Pump Station in southeast Denver. Construction of a hydro plant at Gross Dam was expected to start soon.

Ground was broken in the spring of 2001 for the department's \$140 million water Recycling Water Treatment Plant near the South Platte River in Commerce City. When the first phase is completed in 2004, up to 30 million gallons a day of treated; recycled water will be piped to industrial users and irrigators through a nonpotable distribution system. Denver Metro Wastewater will supply effluent to the system, which will include a treatment plant on the site of Denver Water's old water recycling demonstration plant, as well as pipelines, storage tanks and three pump stations. The recycling facility is a water resource project for Denver Water. At full capacity in 2014, it will supply about 17,000 acre-feet of reuse water a year, freeing raw water for potable treatment.

Denver Water faces continuing challenges as a result of the ongoing drought, which has held the area in its grasp for nearly four years, and from two major forest fires, the first in 1996, and the second in the summer of 2002.

The drought, which has caused reservoirs to stand well below peak storage capacity, has prompted water-use restrictions on Denver Water' customers. Concurrently Denver Water continues to promote conservation to all of its customers. It has called for changes in landscaping practices to promote less use of blue grass and water-hungry turf, and more emphasis on Xeriscaping - the use of drought-tolerant plants and vegetation - in urban landscape design.

The 2002 Hayman fire, which affected over 7,000 acres of Denver Water land surrounding Cheesman Reservoir, and the 1996 Buffalo Creek fire, which charred thousands of acres of forest land upstream from Denver Water's Strontia Spring Reservoir, are expected to have long-term impacts on the water supply. Flooding following the Buffalo Creek fire deposited 600,000 cubic yards of sediment in Strontia Springs Reservoir, more than was predicted to occur in 50 years after the reservoir was constructed in 1983. A small rain storm following the Hayman fire resulted in sediment being washed into Cheesman Lake in late summer 2002.

Work continues by Denver Water crews to reclaim the land around Cheesman. Workers are placing straw-bale sedimentation dams in gullies, and across streams that feed the lake. They are re-seeding scorched areas burned by the fire, and will plant 250,000 trees over the next 10 years, all in efforts to stabilize and revegetate land scorched by the fire and prevent sedimentation of Cheesman Lake. Strontia Springs has been cleared of massive amounts of debris that came with the flood of 1996, but sedimentation remains a threat and dredging the reservoir may be a necessity.

All reclamation efforts are to assure the quality of water that ultimately feed the Foothills and Marston Water Treatment Plants in south metropolitan Denver. Ironically, with the Colorado drought, no further flooding of sedimentation has occurred at either the Cheesman or Strontia Spring sites. The drought also has altered Denver Water maintenance procedure, enabling workers to be diverted to conduct land-reclamation efforts, which will be ongoing for the foreseeable future.

Denver Water now serves more than 1.2 million people, more than a quarter of the state's population. It uses less than two percent of the average annual flow of Colorado's rivers and streams to do it. Denver Water maintains a reputation as one of the nation's finest systems due to the solid foundation provided by the framers of Denver's City Charter amendments. They created an autonomous, independent and non-political Board of Water Commissioners with the singular purpose of meeting the water supply needs of the residents of a community located on the Great American Desert.

# The Denver Water Service Area, Population, & Demand

Denver Water's Combined Service Area, shown below, totals over 329 square miles. The Combined Service Area is composed of the City and County of Denver and 72 treated water distributor contracts (see Table 1). In addition, Denver Water serves several special contracts with fixed contract amounts and two major raw water contracts.

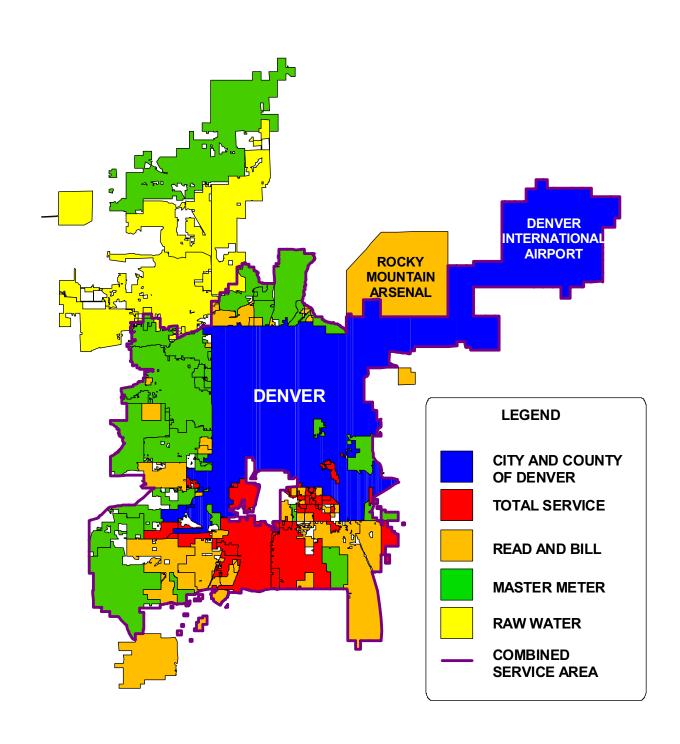


Table 1

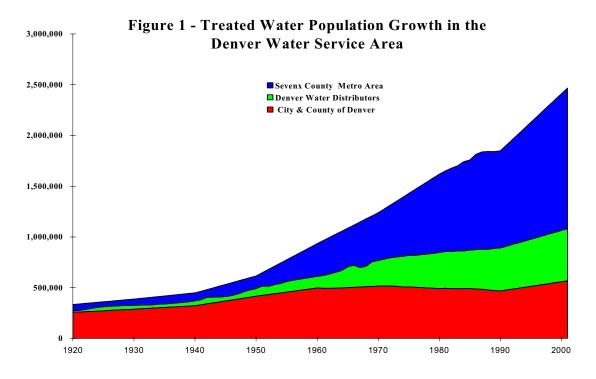
Denver Water Distributor Contract Service Areas
(Square Miles)

<u>Denver</u>	
City and County	111.3
<b>Denver International Airport</b>	43.3
Subtotal	154.6
<u>Outside Denver</u>	
Total Service Distributors	36.5
Read and Bill Distributors	44.9
Master Meter Distributors	90.1
Subtotal	171.5
TOTAL	326.1

Source: 2001 Denver Water Directory of Distributors, Section 4. Figures exclude fixed special contracts and approximately 2.9 square miles not presently within a contract distributor area.

In 1988, the City and County of Denver annexed 43.3 square miles for the Denver International Airport and commercial corridor. This annexation expanded the city limits of Denver. The old Stapleton Airport area is being redeveloped in mixed commercial and residential uses.

Denver Water serves three main types of distributors: Total Service, Read and Bill, and Master Meter. In Total Service districts, Denver Water operates and maintains the district's facilities, including customer billing, at a level equivalent to the service provided within the Denver City Limits. In Read and Bill districts, Denver Water reads the meters and bills the customers, but does not operate the distribution system. In Master Meter districts, Denver Water sells water wholesale to the district and bills the district directly. Denver Water also has several special contracts that receive a fixed amount of water and are not included in the figures above.



#### **Our Customers**

Denver Water supplies water to about half of the population in the Denver Metropolitan Area, approximately 1.2 million people (see Figure 1). Since 1950, the treated water population served by Denver Water has doubled. The demand for treated water has increased from the 1950 level of 37 billion gallons to the year 2002 level of 75.2 billion gallons (see Figure 2). Currently, there are approximately 1.1 million people receiving treated water and approximately 100,000 receiving raw water from Denver Water.

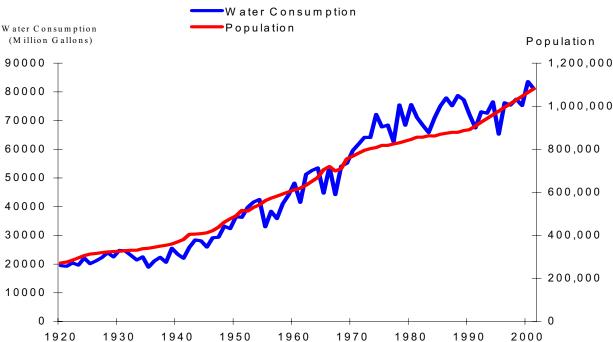
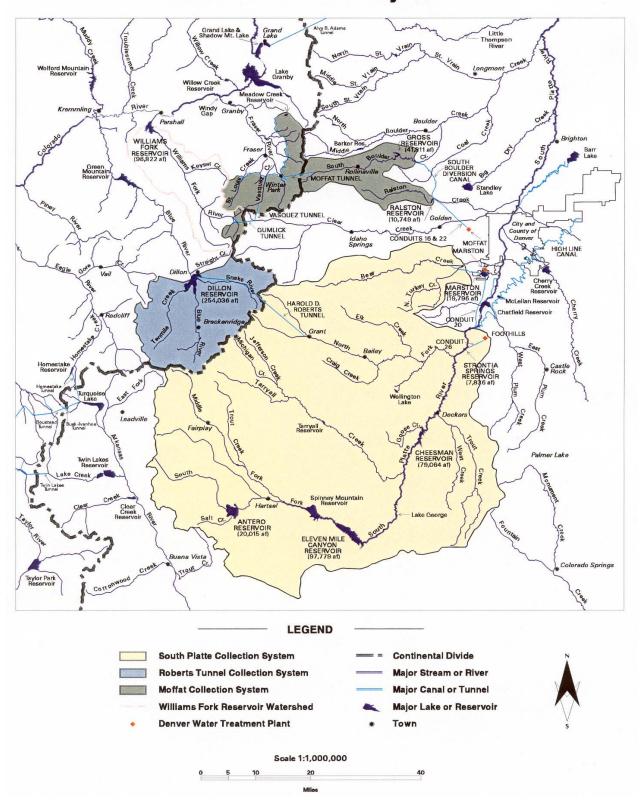


Figure 2 - Treated Water Population & Demand

# City and County of Denver Board of Water Commissioners Water Collection System



STATISTICAL SUMMARY 1996 - 2001						
	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>
Population served <sup>(1)</sup>	1,081,000	1,064,000	1,046,000	1,029,000	1,012 ,000	995,000
Total Treated Water Consumption in Million Gallons	81,054.72	86,585.25	75,232.01	77,475.48	75,363.33	76,203.96
Average Daily Consumption in Million Gallons	222.07	228.38	206.12	212.24	206.47	208.21
Average Consumption per Capita in Gallons Maximum Daily Consumption in Million Gallons	205 488.71	215 478.19	197 475.66	206 512.53	204 517.57	210 456.99
Maximum Hour Treated Water Use Rate (MGD) <sup>(2)</sup>	716.86	751.47	676.26	763.87	712.48	736.53
Treated Water Pumped in Million Gallons	54,161.28	47,953.92	38,149.92	33,990.21	34,179.67	39,578.30
B W + 0 + 0 + 1 + 5 +	504.000	545 470	545 470	545 470	545 470	545 470
Raw Water Storage Capacity in Acre Feet	561,883	545,476	545,476	545,476	545,476	545,476
Replacement Reservoir Storage Capacity in Acre Feet	122,432	96,822	96,822	96,822	96,822	96,822
Supply from South Platte River in Acre Feet (3)	129,926	133,912	210,777	190,948	194,478	131,242
Supply from Moffat System in Acre Feet	71,296	59,811	57,272	54,220	77,630	60,520
Supply from Blue River/Roberts Tunnel Sys in Acre Feet	102,282	102,750	54,064	48,384	92,174	89,268
Treated Water Pumping Capacity in MGD <sup>(2)</sup>	1,052.5	1,052.5	1,052.5	1,027.5	1,027.5	1,027.5
Raw Water Pumping Capacity in MGD <sup>(2)</sup>	92.2	92.2	92.2	92.2	92.2	92.2
Treatment Plant Capacity in MGD <sup>(2)</sup>	645.0	645.0	645.0	645.0	645.0	645.0
Treated Water Reservoir Capacity in Million Gallons	378.45	378.75	378.75	371.75	400.5	408.2
Supply Mains in Miles (Mountain Collection System)	77.6	77.6	77.6	77.6	77.6	77.6
Supply Mains in Miles (Metropolitan Denver Area)	40.7	40.7	40.7	39.2	39.2	39.2
T & D Mains in Miles (inside Denver & Total Service						
Contract Distributors)	2,499	2,474	2,449	2,416	2,486.1	2,464
Nonpotable Transmission & Distribution Mains in Miles	17.3	17.3	16.4	15.6	15.6	14.7
Total Active Taps – End of Year <sup>(1)</sup>	286,051	282,985	278,374	274,938	271,338	268,676
Fire Hydrants Operated & Maintained	14,173	13,991	13,681	13,136	13,575	13,298
Breaks in Mains – Denver	261	243	195	166	251	200
Service Leaks	794	907	663	779	591	648
Fire Hydrants Tested and Repaired	29,604	23,875	25,052	27,150	26,188	14,894
Employees (Authorized Staffing)	1,060	1,046	1,044	1,036	1,032	1,030
Financial Information <sup>(4)</sup>						
Gross Property, Plant & Equipment	\$1,588,496	\$1,492,281	\$1,408,333	\$1,348,620	\$1,282,062	\$1,236,743
Net Property, Plant & Equipment (after depreciation)	1,220,205	1,144,868	1,082,973	1,042,918	993,753	968,496
Additions to Property, Plant & Equipment	104,721	87,493	65,806	73,095	47,664	33,178
Operating Revenues <sup>(5)</sup>	\$151,198	\$153,429	\$127,655	\$128,570	\$121,074	\$118,580
Operating Expenses <sup>(5)</sup>	110,618	106,066	100,719	97,489	93,202	92,072
Operating Income	40,580	47,363	26,936	31,081	27,872	26,508
Net Income (Loss)	38,257	27,436	21,117	21,611	19,198	8,193
Retained Earnings (Reinvested)	\$550,198	\$503,148	\$467,545	\$438,851	\$410,129	\$384,448
Total Long-Term Debt <sup>(6)</sup>	308,879	289,681	294,757	299,773	329,466	334,618

#### Footnotes:

2002 information was not available at the time of publication.

- Population estimates based on treated water customers only. Beginning in 1996, population served and active taps exclude City of Broomfield.
- MGD = Million Gallons per Day.
  Supply includes effluent exchanges.
- (2) (3) (4)
- Amounts expressed in thousands. See "Detail of Revenues and Expenses."
- Includes current and long-term portion of bonds payable, certificates of participation, and obligations under capital lease, net of discounts, premiums and deferred losses on advance refundings.

CUSTOMER SERVICE DATA 1996 – 2001	2224		4000	4000	400=	4000
	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>
Active Taps <sup>(1),(5)</sup>						
Beginning of Year	282,985	278,374	274,938	271,338	268,676	265,820 <sup>(5)</sup>
Activated during Year	3,273	4,871	3,732	3,919	2,825	3,013
Discontinued during Year	<u>(207)</u>	<u>(260)</u>	<u>(296)</u>	<u>(319)</u>	<u>(163)</u>	<u>(157)</u>
Net Increase during Year	<u>3,066</u>	<u>4,611</u>	<u>3,436</u>	3,600	<u>2,662</u>	<u>2,856</u>
Total Active Taps – End of Year	<u>286,051</u>	<u>282,985</u>	<u>278,374</u>	274,938	<u>271,338</u>	<u>268,676</u>
Services behind Master Meters	66,997	66,135	64,655	64,225	63,449	62,713 <sup>(5)</sup>
Active Meters (excludes customers behind Master Meters) <sup>(1)</sup>						
Inside City	148,936	147,472	145,466	143,602	142,169 <sup>(4)</sup>	141,248
Read and Bill	36,955	36,760	36,114	35,379	34,638	33,791
Total Service	31,974	31,442	30,965	30,575	29,892	29,425
City and County	1,071	1,058	1,055	1,019	1,018	1,020
Monthly	<u>118</u>	<u>118</u>	<u>119</u>	<u>138</u>	<u>172</u>	<u>479</u>
Total Active Meters	219,054	216,850	213,719	210,713	207,889	205,963
Total Active Taps – End of Year	<u>286,051</u>	<u>282,985</u>	<u>278,374</u>	<u>274,938</u>	<u>271,338</u>	<u>268,676</u>
Stub-Ins on System <sup>(2)</sup>	2,992	2,389	3,086	3,483	1,895	2,422
Fire Hydrant Use Permits	456	680	1,132	1,185	999	918
AMR (Automatic Meter Reading) Installations	30,359					
Turn-Offs due to Delinquent Accounts	10,293	9,045	7,920	7,992	8,650	9,317
In-Home Water Audits	98	1,155	1,092	1,751	1,637	1,343
Call Center Calls	133,395	173,016	169,399	140,284	143,955	160,808
Water Quality Calls (3)						
Taste and Odor	78	220	148	530	91	
Clarity	75	75	189	278	197	
Hardness	0	1	69	70	68	
Other	80	9	485	644	1,361	
New Taps Made <sup>(6)</sup>	3,869	3,834	4,498	5,838	3,273	3,178

#### Footnotes:

2002 information was not available at the time of publication.

- (1) Service is on or has not been off for 5 consecutive years. Does not include taps sold to raw water distributors.
   (2) Stub-Ins are a connection made solely to extend the service line from the main to the valve at the property line prior to the
- (3) Customer Service started taking Water Quality Calls in 1996. Information prior to 1996 unavailable.
   (4) Beginning in 1997, large meters for wholesale distributors excluded from count, consistent with "Analysis of Customer Accounts for Treated Water."
- Broomfield taps(6,179), removed from Master Meter counts in 1996.

  Customer Service Field took over the duties of the Tapping Shop (Meter Shop) in 1995. Information prior to 1995 unavailable.

# Denver Facts\* (Winter – 2002-2003)

#### Denver:

Date Founded:	1858	Universities and Colleges:	14
Date Incorporated:	1861		
	Mayor / Council	Denver Public School Enrollment (20	<b>01)</b> : 72,437
Land Area: :(square miles)	154.63	High Schools:	10
Land Area: (acres)	98,963	Middle Schools:	18
Latitude:	39° 43' N	Elementary Schools:	87
Longitude:	-104° 58' W		
Elevation: (feet above sea level)	5,280	Shopping Centers:	58
Lowest Point: (feet above sea le	vel) 5,140		
Highest Point: (feet above sea le	evel) 5,672	Restaurants:	700+
Rivers: South Platt	e, Cherry Creek		
Average Annual Rainfall: (inc	hes) 15.4	Convention Facilities (2001):	
Average Annual Snowfall: (in	ches) 55.4	Conventions:	45
Average February Temperati	-	Delegate Attendance:	190,063
Average August Temperature		Colorado Convention Center (squa	are ft) 300,000
Average Growing Season: (d		(1)	,
Average Sunshine: (days)	300+	Denver Employment (2000):	
(, .,		Jobs in Denver:	468,392
<b>Municipal Parks and Recreation:</b>		Percent of Metro Area:	33.3%
Park Area (acres)	5,100	Largest Employee Sectors: Services, Government, Retail	
Parks:	301	Major Industries:	
Golf Courses (public and private)	): 15	Communications, Utilities, Transportation	on
Parkways: (miles)	100	Unemployment Rate (2002):	4.5%
Recreation Centers:	29		
Swimming Poos:	19	Downtown (2001):	
Hike-Bikeways: (miles)	135	Employment:	113.000
Mountain Parks: (acres)	13,600	Total Floorspace: (square feet)	45,000,000
Playing Fields:	325	Office: (square feet)	25,000,000
	Lighted) 143	Retail: (square feet	2,800,000
,	- •	Hotel Rooms:	5,329
Denver Public Libraries (2001):	23		•
Circulation:	12,486,851	Assessed Valuation (2001):	\$7,885,465,670

## **Metropolitan Population Trends by City**

Municipality	Rank		Land Area Square Miles				
Denver	1	<u>2000</u> 554,636	<u>1990</u> 467,610	<u>1980</u> 492,686	<u>1970</u> 514,678	<u>1960</u> 493,887	<u>2000</u> 154.6
Aurora	2	276,393	222,103	158,588	74,974	48,548	142.7
Lakewood	3	144,126	126,481	112,860	92,743	N/A	42.5
Arvada	4	102,153	89,235	84,576	49,844	19,242	33.0
Westminster	5	100,940	74,625	50,211	19,512	13,850	32.9
Centennial	6	100,677	N/A	N/A	N/A	N/A	28.0
Boulder	7	94,673	83,312	76,685	66,870	37,718	25.4
Thornton	8	82,384	55,031	40,343	13,326	11,353	27.2
Longmont	9	71,093	51,555	42,942	23,209	11,489	21.9
Littleton	10	40,340	33,685	28,631	26,466	13,670	13.9

# **Denver Facts\*** (Winter - 2002-2003)

<b>POPULATION</b>	2000		<u>1990</u>		<u>1980</u>		(Change) 1	990-2000
Total	Number	%	Number	%	Number	%	Number	%
Age								
0-4 Years	34,769	6.8	34,764	7.4	33,134	6.8	3,005	8.6
5-17	83,997	15.1	68,115	14.6	77,743	15.8	15,882	23.3
18-34	173,260	31.2	141,831	30.3	178,958	36.4	31,127	22.2
35-64	197,184	35.6	158,095	33.8	140,607	28.6	39,089	24.7
65 & Over	62,426	11.3	64,805	13.9	61,923	12.6	-2,379	-3.7
Median Age	33.1		34		30.02		-9	-2.7
Household Type								
Total Households	239,235	100.0	210,952	100.0	211,004	100.0	28,283	13.4
Family	119,300	49.9	109,037	51.7	119,288	56.3	10,263	9.4
Individual	119,935	50.1	101,915	48.3	92,716	43.7	18,020	17.7
Persons Per	2.27		2.17		2.27		.1	4.6
Persons in Group Qtrs	12,719		10,850		12,554		1,869	17.2
Education (25 years a	nd Over)							
0-8 yrs completed	34,253	9.1	24,678	7.7	39,241	12.7	9,575	38.8
12 or more	74,922	78.5	75,653	79.2	93,134	74.7	-731	-1.0
College (4 or more)		34.5	93,144	29.0	76718	24.8	35,921	38.6
College (4 of filero	, 120,000	04.0	00,144	20.0	70710	24.0	00,021	00.0
Labor Force (civilian)								
In Labor Force	301,434	67.6	250,743	66.9	257,720	66.0	50,691	20.2
Employed	284,340	94.3	233,602	93.2	244,838	95.0	50,738	21.7
Unemployed	17,094	3.8	17,141	4.5	12,882	5.0	-47	-0.3
Not in Labor Force	144,263	32.3	121,503	32.5	133,074	34.1	22,760	18.7
Employment Type	405 775	<b>50.0</b>	404.074	<b>-</b> 4.0	444.005	40.0	44 704	
Commercial	165,775	58.3	121,071	51.8	114,895	46.9	44,704	36.9
Industrial	56,387	19.8	54,875	23.5	66,859	27.3	1,512	2.7
Public/Quasi-Public	60,523	21.3	52,274	22.4	56,545	23.1	8,249	15.8
Land Use			2000			198	6	
	Ectimat	od Acro	s (thousan	de)	Ectima		(thousands)	

∟and Use	2000	1986
	Estimated Acres (thousands)	Estimated Acres (thousands)
Total	99.0	71.2
Residential	24.1	22.8
Commercial	3.8	3.0
Industrial	4.9	4.5
TCU	26.0	7.8
Public/Semi-Public	7.1	6.0
Parks and Recreation	n 4.0	3.6
Vacant	7.1	7.5
Streets	22.0	16.0
1988 Annexation:	27,718 Acre	S

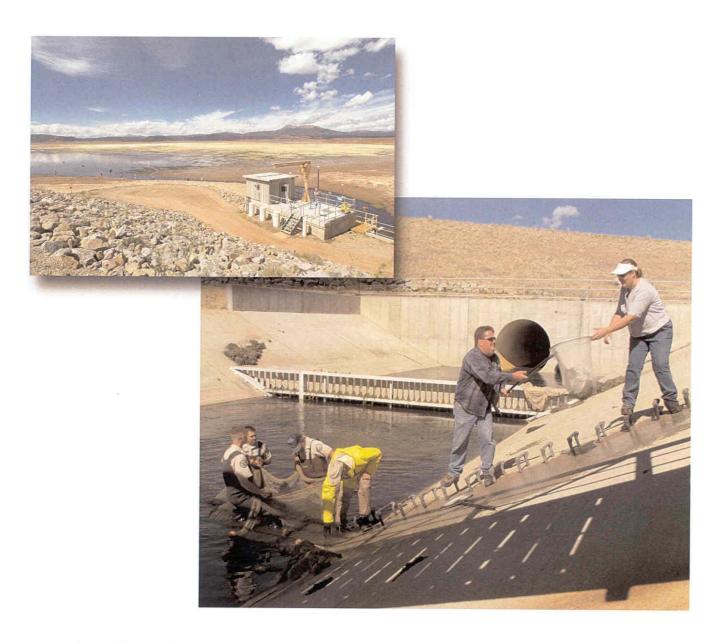
#### **Major Redevelopment Projects:**

Gateway: 4,416 Acres Lowry: 1,866 Acres Stapleton: 4,700 Acres Central Platte Valley: 1,100 Acres

\*Demographic Information taken from:

Denver Facts prepared by:

Denver Community Planning and Development Agency
City and County of Denver www://DenverGov.org/planning



Antero Reservoir, located on the south fork of the South Platte River, in Colorado's South Park, was drained during the summer of 2002 and its water sent downstream to Cheesman Reservoir. The reservoir was drained to consolidate water supplies in Cheesman and reduce evaporation losses that were occurring at Antero as well as to help settle the sediment loading resulting from the runoff from the Hayman fire.

Denver Water's Eric Hibbs, center, Antero caretaker, assisted Colorado Division of Wildlife officers in the rescue of Antero's fish population. Trout that did not go downstream with the stream flow were netted and transplanted in Eleven Mile Canyon Reservoir. More than 10,000 trout were taken by net by wildlife officers.

# Section 2 - Receipts

### **Total Receipts Summary**

Total 2003 receipts are comprised of operating receipts from the sale of water to customers, drought surcharges, participation receipts (front-end payments for capacity in specific facilities to serve specific groups of customers), System Development Charge receipts (tap fees), tap surcharges, receipts from bond proceeds, as well as small amounts of non-operating and other receipts. Total 2003 receipts are forecast to be \$234,907,000. The following is a brief description of each receipt shown on page 38.

#### **Operating Receipts (Sale of water to customers)**

Operating receipts are generated from sales of water to customers. They are used to pay for normal operation and maintenance, replacement of facilities, plant additions as well as debt service. The 2003 budget of \$133,065,000 reflects a rate increase of 3.1% and an anticipated 15% reduction in annual demand due to water reductions in response to the drought. Actual 2002 operating receipts of \$146,210,000 were \$2.6 million less than budgeted primarily due to Denver Water's aggressive conservation efforts in the face of the severe 2002 drought.

Approximately 56% of the 2003 billed water sales revenue is projected to be from outside the City of Denver, while an estimated 44% of the customers are located inside the City of Denver. Water provided to outside City customers is billed at a higher rate than inside City customers.

A breakdown of billed operating revenue by type of customer is shown on page 39. Billed operating revenues and number of customers inside and outside the City of Denver are shown graphically on page 40. See pages 41 - 45 for additional information on rate structure.

#### **Drought Surcharge**

The drought surcharge is a temporary charge that went into effect on September 18, 2002. It is designed to encourage conservation through price and to act as an enforcement mechanism for other drought restrictions. By the Board's direction, the proceeds are to be used to help offset drought & fire related costs. Total drought surcharge receipts for 2003 are projected to be \$11,043,000. Surcharge receipts for 2002 were \$776,000.

#### **Non-Operating Receipts**

These receipts are obtained from payments for services that Denver Water renders such as ditch assessments for delivery of non-potable water for irrigation, main inspections, installation of taps, the calculating and mailing of sewer bills, rents on Denver Water facilities and other such services. Total non-operating receipts for 2003 are projected to be \$2,811,000, based on historical trend. A breakdown by type of receipt is shown on page 39. Actual 2002 receipts of \$3,169,000 were \$222,000 more than budgeted substantially due to higher than budgeted Right of Way licenses and income from rental of Board property.

#### **Hydropower Receipts**

These are receipts from the sale of surplus power provided by generating facilities at the Dillon, Strontia Springs and Williams Fork dams, Roberts Tunnel, Foothills Treatment Plant and Conduit 27 at Hillcrest. Hydropower receipts for 2003 are anticipated to be \$988,000 or, 68% of 2002. This decrease is due to drought conditions and low reservoir levels. In 2002 hydropower receipts of \$1,456,000 were \$704,000 less than budgeted primarily due to low discharge rates caused by the drought and longer than scheduled maintenance outages.

#### **System Development Charges**

These are tap fees for new connections to the Denver Water system that represent the value of the capacity used by the new customer. System Development Charge receipts are projected to total \$23,783,000 for 2003 based on anticipated building trends. See pages 46 - 48 for additional information. Actual 2002 receipts of \$36,644,000 were \$9.2 million more than budgeted. This is largely due to the unbudgeted receipt of \$5.0 million from Cherry Creek Water & Sanitation District for treated water SDC's.

#### **Tap Surcharge**

The tap surcharge is a temporary fee imposed during the current water supply shortage and will be terminated when reservoir storage reaches 80% of full. The tap surcharge is an additional fee based on 20% of the system development charge. It went into effect September 18, 2002. The proceeds will be used for rebate programs related to conservation and water use efficiency programs such as rebates for low volume toilets and cloths washers. Tap surcharge receipts are budgeted to be \$4,538,000 in 2003. The actual tap surcharges for 2002 were \$1,333,000.

#### **Participation Receipts**

Participation receipts for 2003 are projected to be \$2,115,000. The largest item in the 2003 budget is a receipt of \$710,000 from the City of Broomfield for increased capacity in Conduit 81. See page 46 for additional information.

Actual 2002 receipts of \$5,573,000 were \$1.7 million more than budgeted substantially due to higher than expected receipts form Willows Water District of \$807,000 and, higher than budgeted tap fees for existing facilities.

#### Reimbursements and Grants

Reimbursements of \$3,123,000 are anticipated for 2003. This includes \$1,883,000 from the United States Department of Agriculture / National Resource Conservation Service (USDA / NRCS) to help mitigate the costs of the Hayman fire around Cheesman reservoir and, \$500,000 for an Environmental Protection Agency grant to pay for specific revegetation of the burn area around Cheesman reservoir. Total 2002 reimbursements of \$1,881,000 were \$1.7 million more than budgeted due to receipt of grant money from the USDA / NRCS of \$535,000 and reimbursements for several small projects.

#### Interest on Investments

Denver Water has two investment portfolios. The first, the liquidity portfolio, is designated to meet daily and annual needs for cash. The liquidity portfolio is invested in short-term, low-risk money market instruments. The other portfolio, the long term investment portfolio, consists of funds that are not expected to be needed for several years, such as reserves against catastrophic losses, and future capital programs. The long term investment portfolio is managed by an outside investment firm and contains investment grade corporate bonds as well as government securities. Both portfolios are accounted for on a fair value basis. The combined interest paid to Denver Water on both investment portfolios in 2003 is budgeted at \$4,486,000. Actual 2002 interest income was \$8,459,000, of which \$6.6 million was interest received by Denver Water. The balance represents net unrealized gains on the longer-term investment portfolio.

#### Other

These receipts consist of reimbursements for the relocation of mains and fire hydrants, proceeds from the sale of surplus assets, and minor items not included elsewhere. Other receipts are projected to be \$8,455,000 in 2003, including \$6.1 million for proposed surplus land sales. Actual 2002 receipts of \$3,396,000 are \$1,196,000 over budget substantially due to unbudgeted land sales and relocations of mains, hydrants and workers compensation experience refunds.

#### **Bond Proceeds**

Denver Water has for many years had a program of refunding a portion of each year's maturing bonds. This has the effect of extending the maturity of debt used to finance capital projects so that it approximates the 40 or 50 year useful life of the financed facility while taking advantage of the lower interest rates on shorter-term bonds. In the past, Denver Water relied on general obligation bonds. However, in 2002 the City charter was changed to remove Denver Water's authority to issue general obligation bonds. In the future, like most enterprises, Denver Water will issue revenue bonds. Bond proceeds for 2003 are projected at \$40,500,000, which includes \$31,500,000 million of new money and \$9.0 million for refunding currently outstanding general obligation bonds with revenue bonds. Actual 2002 bond proceeds of \$11,393,000 were \$16.0 million less than budgeted as a budgeted sale of \$15.0 million in new certificates of participation was not required due to higher than anticipated cash balances early in the year as well as the desire to know the outcome of the proposed charter change before approaching the capital markets for new money.

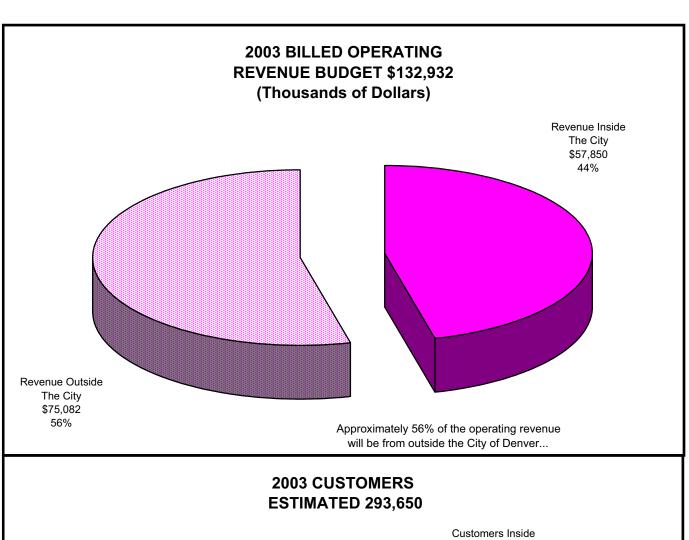
## Comparison of Receipts 2000 - 2003 (Thousands of Dollars)

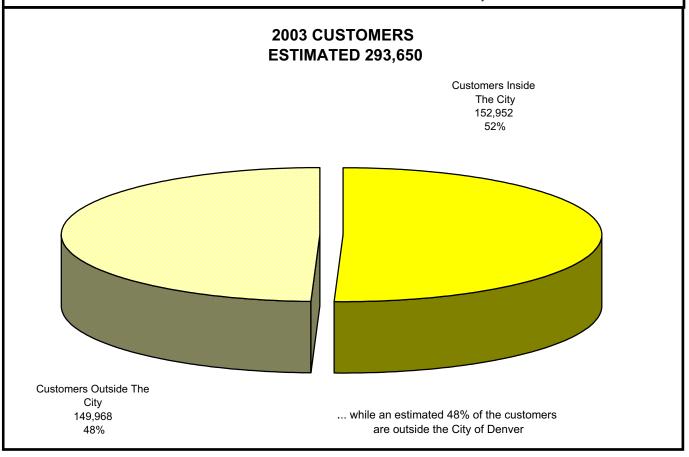
		2000 Actual		2001 Actual		2002 Budget		2002 Actual		2003 Budget
Receipts:	-		_		-		_		-	
Operating	\$	151,490	\$	149,188	\$	148,785	\$	146,210	\$	133,065
Drought Surcharge		0		0		0		776		11,043
Non-Operating		3,315		3,102		2,947		3,169		2,811
Hydropower		2,108		1,904		2,160		1,456		988
System Development Charges		25,620		22,259		27,446		36,644		23,783
Tap Surcharge		0		0		0		1,333		4,538
Participation		6,392		7,034		3,918		5,573		2,115
Reimbursements & Grants		791		6,802		152		1,881		3,123
Interest on Investments		8,761		9,522		4,804		8,459		4,486
Other	-	2,463	_	3,200	-	2,200	_	3,396	-	8,455
Subtotal Receipts	\$	200,940	\$	203,011	\$	192,412	\$	208,897	\$	194,407
Bond Proceeds	-	12,677	_	32,658	-	27,395	_	11,393	-	40,500
Total Receipts	\$	213,617	\$_	235,669	\$	219,807	\$_	220,290	\$	234,907

# Comparison of Operating and Non-Operating Receipts 2000 - 2003 (Thousands of Dollars)

Operating Receipts Billed Operating Revenue:	-	2000 Actual	_	2001 Actual	_	2002 Budget	_	2002 Actual	_	2003 Budget
Metered General	\$	102,225	\$	98,763	\$	101,159	\$	96,398	\$	90,799
Private Fire Protection		642		655		611		672		659
Public Authority		6,895		6,705		6,681		5,408		5,981
Sales for Resale-Treated		33,834		34,153		32,832		32,719		29,521
Other Sales of Water-Raw		275		299		157		435		132
Sales for Resale-Raw		5,181		3,788		3,826		5,514		3,252
Drought Permits		0		0		0		74		0
Drought Penalties		0		0		0		111		338
Other Operating Revenue	-	2,291	_	3,548	_	3,361	_	3,838	_	2,250
Total Billed Operating Revenue	\$	151,343	\$	147,911	\$	148,627	\$	145,169	\$	132,932
Cash Flow Adjustment*	-	147	_	1,277	_	158	_	1,041	_	133
Total Operating Receipts	\$	151,490	\$_	149,188	\$_	148,785	\$_	146,210	\$_	133,065
% Receipts to Billed Revenue		100.10%		100.90%		100.10%		100.70%		100.10%
* Cash Flow Adjustment is the dif received in a year due to delays										

#### **Non-Operating Receipts** Merchandising, Jobbing & **Contract Work** 1,669 \$ 1,397 1,674 \$ 1,587 \$ 1,623 \$ 735 630 706 633 Canals, Ditches and Ranches 641 Sewer Billing Charges 599 513 513 539 532 Other Non-Operating 307 279 217 301 249 **Total Non-Operating** Receipts 3,315 3,102 2,947 \$ 3,169 \$ 2,811





#### **Water Rates**

The Board of Water Commissioners is authorized by Section 10.1.9 of the Charter to set rates for water service. Since its inception, the Board has set rates at a level sufficient to service its debt and to meet its expenses of operation and maintenance. The Board has never required ad valorem taxes to meet its obligations.

Rate increases are implemented from time to time in order to offset the impact of inflation and other operating financial requirements.

#### **Water Rate Levels**

The Board continually reviews its structure of water rates, adjusting them as may be necessary to provide adequate levels of revenue. In view of the operational and capital needs of the system and the impact of inflation, the Board conducts ongoing rate studies to determine required rate levels.

On September 4, 2002, the Board adopted new rates to take effect for water bills dated on and after January 1, 2003. The new water rates are designed to increase revenue from water sales, under normal weather conditions, by 3.1%.

#### **History of Rate Increases**

The following statistics show effective dates of past actions by the Board in setting adequate rates and the proposed incremental increases in revenues. During the period 1918 through 1958 there were several adjustments in rates, but the net effect was that rates in 1958 were unchanged compared to the rates in 1918.

Effective Date April 1, 1975	Increase in Revenues
April 16, 1976	20.0%
April 16, 1980	32.2%
February 1, 1982	12.0%
April 15, 1986	7.0%
April 15, 1987	5.0%
June 15, 1992	2.2%
June 1, 1993	4.0%
June 1, 1994	4.5%
January 1, 1995	8.4%
January 1, 1996	5.8%
January 1, 1997	4.5%
January 1, 1998	3.1%
January 4, 1999	0.54%
March 6, 2000	2.5%
January 1, 2001	2.4%
January 1, 2002	2.5%
January 1, 2003	3.1%

## **Types of Service**

Water rates are based on three types of retail metered service: Inside City, Outside City Read and Bill, and Outside City Total Service. Inside City service refers to all water users inside Denver. Outside City Read and Bill service refers to areas outside the city where Denver Water is responsible for water delivery to a distributor and for reading meters and billing customers, while the distributor is responsible for operation and maintenance of the distribution system. Outside City Total Service refers to areas outside the city where Denver Water is responsible for water delivery, reading meters and billing customers, as well as operation and maintenance of the distribution system.

Denver Water also provides wholesale water service to Master Meter Distributors (water districts outside the city) that own and operate their own water system, perform their own meter reading and customer billing, and who purchase water on a wholesale basis for distribution to their respective retail customers. A variation of the standard Master Meter Contract was added in 2002. A Master Meter Distributor may elect to continue customer billing and collection functions within its service area but contracts with Denver Water to operate, maintain and replace its water system as needed. Denver Water will bill the Distributor through master meters at a rate that reflects the cost of providing this additional service. As of December 31, 2001, wholesale water district contracts accounted for 24.3% of total treated water consumption.

A variation to the standard "Total Service" contract is the Total Service Improvement contract in which a Distributor whose system does not currently meet Denver Water Engineering Standards may request to enter into a "Total Service" Contract that includes special provisions for Denver Water to take dominion over the Distributor's existing water system and to upgrade the Distributor's water system to meet Denver Water engineering standards. A surcharge is assessed to each of the customers within the Distributor's service area to pay for the improvements.

## **Residential Bimonthly Billings**

The table below indicates the estimated 2003 bimonthly billing for a single-family home with an annual consumption of 137,000 gallons per year for 3/4" metered service. It was prepared for comparison purposes only.

Average Summer

	Avorage Willton	Avorage Cammor
	Effective	Effective
Type of Service	<u>January 1, 2003</u>	<u>January 1, 2003</u>
Inside City	\$25.50	\$58.82
Outside City (Read & Bill)	30.70	72.16
Outside City (Total Service)	36.56	87.31
	<u>Month</u>	Consumption in Gallons
	January - February	12,000
	March - April	13,000
	May - June	24,000
	July - August	42,000
	September - October	31,000
	November - December	<u>15.000</u>
	Total Annual Consumption	<u>137,000</u>

Average Winter

### 2002 Water Consumption and Largest Customers

Denver Water does not depend on any one customer or any group of customers for a major portion of its revenue. As shown in the table below, the 25 largest customers accounted for only 4.67% of treated water sales revenue received in 2002.

# 25 LARGEST CUSTOMERS - WATER CONSUMPTION AND REVENUE - 2002 (NON-ACCRUAL BASIS)<sup>1</sup>

Account Type	Consumption (000 Gallons)		Water levenue
Multi-location petroleum retailer	474,354	\$	853,930
School System	343,247	•	524,487
Public Utility	336,075		574,748
Housing Authority	283,110		424,229
Public Recreation Agency	186,954		379,701
Federal Government	183,402		337,284
Beverage Company	154,760		226,366
Manufacturer	152,819		281,176
Medical Center	150,143		239,598
Retail Grocer	140,269		214,272
Medical Center	124,423		189,119
Homeowners Association	118,570		181,625
School System	115,538		175,229
Manufacturer	111,888		157,703
Property Management	110,361		167,071
Food Company	100,067		145,134
Hotel Chain	97,216		144,805
Public Utility	94,494		176,404
Homeowners Association	93,225		177,824
Manufacturer	92,542		136,343
Medical Center	87,553		130,744
Beverage Company	85,223		124,894
Homeowners Association	80,087		120,003
Homeowners Association	75,996		167,307
Homeowners Association	75,424		<u>110,635</u>
Total - 25 Largest Customers	3,867,740	\$	6,360,630
Total Sales of Treated Water	72,354,662	<u>\$ 13</u>	86,056,292
Percent of 25 Largest Customers to Total Sales			
of Treated Water	5.35%		4.67%

<sup>&</sup>lt;sup>1</sup> This schedule represents actual billings made for water during the year. The difference from amounts on an accrual basis is imaterial. In addition to the accounts listed, Denver Water provided 2,455,093 (000 gallons) of treated water to the City and County of Denver. Revenues from these sales were \$2,531,681.

# **Survey of Comparative Water Bills**

This table compares Denver's annual residential water bills with those of other independent suppliers in the Denver Metropolitan area for a representative residential customer based on usage of 137,000 gallons per year. This information is for comparison purposes only.

# ANNUAL RESIDENTIAL WATER CHARGES DENVER AND OTHER WATER DISTRIBUTORS IN THE DENVER METROPOLITAN AREA 2002

	Annual Water	Percent of Denver Inside City
City	Service Charge*	<u>Customer Charges</u>
Indian Hills	¢2 297 00	904.10%
Golden Outside	\$2,287.00 823.76	325.65%
Broomfield Outside	789.02	311.91%
Louisville Outside	683.88	270.35%
Lafayette Outside	647.72	256.06%
Thornton Outside	640.45	253.18%
Northglenn Inside	605.85	239.50%
Colorado Springs Outside	536.24	211.99%
Morrison Inside	487.50	192.72%
Westminster Outside	483.62	191.19%
Arvada Outside	466.65	184.48%
Boulder Outside	446.61	176.55%
Thornton Inside	426.51	168.61%
Golden Inside	411.88	162.82%
Boulder Inside	397.89	157.29%
Broomfield Inside	396.07	156.57%
Westminster Inside	392.25	155.06%
Pueblo Outside	385.45	152.38%
Denver Outside	371.63	146.91%
Highlands Ranch	359.15	141.98%
Colorado Springs Inside	357.49	141.32%
Louisville Inside	338.94	133.99%
Englewood Outside	327.78	129.58%
Lafayette Inside	323.86	128.03%
Aurora Inside	313.92	124.10%
Arvada Inside	311.10	122.98%
Glenwood Springs Inside	280.44	110.96%
Pueblo Inside	256.63	101.45%
Denver Inside	252.96	100.00%
Englewood Inside	239.69	94.75%

<sup>\*2003</sup> not available at the time of publication.

#### **System Development Charges and Participation Receipts**

In addition to operating revenues and bond proceeds, funds are generated from (1) System Development Charges ("SDC's"), which are fees received for new connections to Denver Water's system, and (2) Participation Receipts, which are contributions paid by developers for the cost of specific facilities (e.g. distribution and transmission mains, pump stations and clear water reservoirs) to provide their developments with water service.

The System Development Charge ("SDC"), instituted in 1973, has provided a major source of funds for capital expenditures. Since 1973, Denver Water has collected approximately \$438.5 million in SDCs. This charge applies to any applicant who is granted a license to take water through Denver Water's system or through a system deriving its supply from Denver Water. Such charge is assessed upon application for a new tap and is based upon the (1) gross square footage of the single family residential lot or, (2) the number of units in a multiplex building up to 5 units or, (3) the size of the connection required. (See table on the following page.)

Since 1974, developers have been required to participate in the front-end financing of facilities necessary to meet their specific needs. Total participation receipts of \$115.8 million have been collected since inception.

On December 18, 2002, the Denver Board of Water Commissioners approved an average 9.2% increase for all treated water SDCs within Denver Water's Combined Service Area. Non-potable SDCs increased an average of 12.5%.

System Development Charges and Participation Receipts Collected
(Cash Basis - net of amounts refunded)
1973 - 2002

	SDC's	Participation Receipts
2002	\$ 36,590,914	\$ 5,567,014
2001	22,186,342	7,026,906
2000	25,525,391	6,392,360
1999	24,223,691	11,963,951
1998	33,155,890	8,411,534
1997	45,058,104	3,732,524
1996	15,137,300	2,913,102
1995	15,527,600	3,927,400
1994	13,535,700	2,881,800
1993	12,181,800	1,343,600
1992	10,920,300	1,198,800
1991	7,530,400	2,330,700
1990	6,615,100	1,838,700
1989	6,251,400	4,965,200
1988	6,084,600	3,067,700
1987	8,544,400	4,561,300
1973-86	<u>149,473,600</u>	43,647,100
Total	\$ 438,542,532	\$ <u>115,769,691</u>

# History of Increases System Development Charges (First Implemented in 1973)

Date	Incremental Increase
July 1, 1973	100.0%
April 1, 1975	50.0%
April 16, 1976	50.0%
January 1, 1980	50.0%
February 1, 1982	50.0%
January 1, 1986	7.0%
January 1, 1998	5.0%
January 4, 1999	5.0%
January 1, 2001	9.0%
April 1, 2003	9.2%

# Water Rate Structure (Effective January 1, 2003)

Customers are billed a service charge plus a consumption charge as follows:

#### **RETAIL SERVICE CHARGE:**

Monthly \$3.09 Bimonthly \$4.43

RETAIL CONSUMPTION CHARGE (Bimonthly)

	Rate Per 1,000 Gallons			
Residential:		Outside City	Outside City	
Single Family	Inside City	Read and Bill	Total Service	
First 22,000 Gallons	\$ 1.58	\$ 1.97	\$ 2.41	
Next 38,000 Gallons	1.90	2.36	2.89	
All Over 60,000 Gallons	2.37	2.96	3.62	
Small Multi-Family with single meter				
First 30,000 Gallons	1.39	1.83	2.14	
Over 30,000 Gallons	1.67	2.20	2.57	
All Other Retail:				
Winter	1.36	1.70	1.96	
Summer1.632.042.35				

WHOLESALE RATE OUTSIDE CITY ONLY (Master Meter)
Consumption Charge:
All Consumption \$ 1.89

WHOLESALE with Maintenance (Master Meter Maintenance) Rate Per 1,000 Gallons

All Consumption \$ 2.56

# System Development Charge Schedule (Effective January 1, 2003)

# **Single Family**

<u>Inside Denver</u> <u>Outside Denver</u>

\$1,200 + \$0.29 per Sq. Ft. \$1,675 +\$0.40 per Sq. Ft.

Multifamily

<u>Inside Denver</u> <u>Outside Denver</u>

\$4,650 + \$970 for each unit over 2 \$6,520 + \$1,360 for each unit over 2

All Other Treated Water		
	Inside Denver	Outside Denver
Tap Size (\$/Tap)		
3/4	3,425	\$4,800
1	10,275	14,400
1½	20,550	28,800
2	30,825	43,200
3	75,350	105,600
4	133,575	187,200
6	232,900	326,400
8	308,250	432,000
10	393,875	552,000
12	479.500	672.000

#### Non-Potable

	Inside Denver	Outside Denver
Tap Size (\$/Tap)		
3/4	\$1,925	\$2,700
1	5,775	8,100
1 ½	15,400	21,600
2	25,025	35,100
3	42,350	59,400
4	63,525	89,100
6	130,900	183,600
8	169,400	237,600
10	217,525	305,100
12	309,925	434,700

	Treated Water		Non-Potat	ole Water
Acre Foot Conversion (\$/AF) _	Inside Denver	Outside Denver	Inside Denver	Outside Denver
Inside the Combined Service Area	7,475	10,425	4,200	5,870
Outside the Combined Service Are	а	10 900		5 870

### **Drought and Tap Surcharges**

#### DROUGHT SURCHARGE

#### **Retail Customers**

#### **Customer Classes**

Single Family Residential	Bimonthly thresholds in thousands of gallons
Block 1 (\$0.25 per 1,000 gallons)	7-22
Block 2 (\$0.50 per 1,000 gallons)	23-60

Block 3 (\$0.75 per 1,000 gallons)

Over 60

Small Multi-Family Residential	Bimonthly thresholds in thousands of gallons				
Duplexes:	<u>Duplex</u>	3-Plex	4-Plex	<u>5-Plex</u>	
Block 1 (\$0.25 per 1,000 gallons)	13-30	18-42	23-54	28-66	
Block 2 (\$0.50 per 1,000 gallons)	31-80	43-103	55-136	67-200	
Block 3 (\$0.75 per 1,000 gallons) (	Over 80	Over 103	Over 136	Over 200	

All Other Retail <u>Bimonthly Thresholds in thousands of gallons</u>

Block 1 (\$0.50 per 1,000 gallons) More than 70% but less than 100% of use in

same period in 2001

Block 2 (\$0.75 per 1,000 gallons) More than 100% of use in same period in 2001

#### **Wholesale Customers (Master Meter)**

Consumption Surcharge (dollars per 1,000 gallons)\*

\$0.50

#### Raw Water Customers\*

Consumption Surcharge (dollars per 1,000 gallons)\*\*

\$0.15

1. \*\*A minimum amount of use will not be surcharged. Minimum use will be 70% of average winter-time use.

#### **Irrigation Customers**

Consumption Surcharge (dollars per 1,000 gallons)

\$0.75

All consumption will be surcharged \$.75 for each 1,000 gallons.

#### **TAP SURCHARGE\***

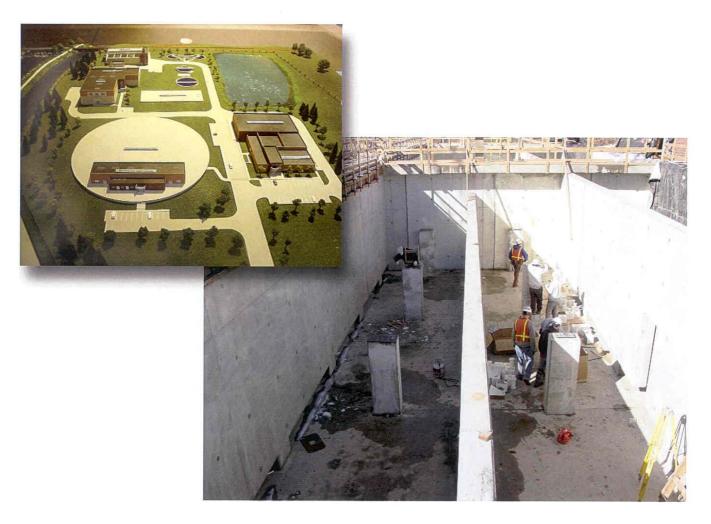
Tap Surcharge

20% added to SDC

<sup>\*</sup>Consumption Surcharge was reflected in bills dated November 1, 2002 and later.

<sup>\*</sup>Customers whose consumption has not reduced a certain percentage by contract will be levied a surcharge.

<sup>\*</sup>Tap Surcharge went into effect on September 18, 2002.



Denver Water's Recycling Water Treatment Plant at E. 56th Ave. and York St., is scheduled for completion in December 2003, and is expected to be on-line by April 2004. An architect's rendering of the plant is at upper left. Below right, work continues on one of the plant's treatment tanks. Upon completion, the facility will ultimately treat up to 17,000 acre-feet of water annually for irrigation and industrial use.

# **Section 3 - Expenditures By Program**

#### **Program Summary**

Denver Water engages in specific activities to carry out Strategic and Integrated Resource Plan policies. These activities have been grouped into five broad categories or programs that follow the flow of water from raw water source to the customer's tap. Each program is further broken down into Operation and Maintenance and Capital expenditure components.

Raw Water Program - Provision of an adequate raw water supply. Includes collection and impounding reservoirs, collection systems, ditches and canals and raw water supply mains.

Recycled Water Program - Includes studies, engineering and construction of successive use of water for non-potable purposes.

Water Treatment Program - Treatment of water for delivery to customers. Includes treatment plants and the Water Quality Control Laboratory.

Delivery Program - Providing treated water to customers and distributors. Includes pumping stations, treated water reservoirs, transmission and distribution mains, fire hydrants, decentralization stations, conservation activities, meter reading and customer billing and assistance.

General Plant Program - Includes the West Side complex, administrative and meeting facilities, warehouses, yards and maintenance shops.

The programs have been further divided into expenditures for operation and maintenance activities and for capital projects. Total 2003 program budget expenditures of \$254,101,000 include \$97,006,000 for operation and maintenance; \$123,465,000 for new capital additions, replacements and improvements; and \$33,630,000 for debt service and related costs.

#### **Operation and Maintenance**

Denver Water experienced several unanticipated impacts on its operations over the past few years that resulted in substantial expenditures in cleanup and repair.

Conduit 55 experienced a major break in November 1998, resulting in expenditures of \$43,000 through the end of that year. Repair costs and failure investigation costs continuing into 1999 were \$1.8 million. All of the 48" pre-stressed concrete pipe (approximately 3 miles) will be replaced with 54" steel pipe in a capital project. \$1.7 million was expended for replacement during 1999, with an additional \$3.8 million in 2000 plus \$19,000 for the ongoing failure investigation. Replacement of the pipe is complete.

Security measures following September 11, 2001 resulted in estimated additional expenditures of \$330,000 for 2001, \$1.8 million for 2002 and an estimated \$1.0 million for 2003.

The High Meadows forest fire in June 2000 resulted in expenditures of approximately \$91,000 related for fire containment.

Several forest fires were also experienced in 2002. The Snaking Creek fire in the Pike National Forest in April 2002 resulted in approximately \$24,000 related to fire containment. The Schoonover fire which affected the Cheesman Reservoir facilities, in May 2002, resulted in fire containment expenditures of approximately \$30,000.

The major fire in 2002 was the Hayman fire which started in June and was finally controlled in July. Over 7,000 acres of the Cheesman Reservoir property was affected by the fire. 2002 costs included \$2,900,000 for rehabilitation of the Cheesman property. Additional rehabilitation costs into 2003 are \$398,000 for reseeding, contouring and related expenses plus additional \$1,748,000 for sedimentation check dams to capture sediment before it flows into the reservoir.

2002 was also impacted by a severe drought resulting in declaration of a Stage II drought July 1 with water restrictions. Costs related to conservation advertising, permitting, water monitors and other drought response related activities totaled \$1,409,000 for 2002. An additional \$162,000 was expended for the customer rebates related to purchasing water conserving toilets and clothes washers. Drought response expenditures for 2003 are budgeted at \$2,743,000 and include expenditures for items such as, public meetings, water conservation enforcement and weather modification program. In additional \$2,962,000 is budgeted for the conservation rebate program. Capital additions and improvements adjustments for drought response are \$863,000 for 2002 and \$5,098,000 for 2003.

Operation and maintenance expenditures have also continued to rise due to increasing costs for water treatment, conduit, main and service line repairs and environmental compliance related activities.

#### **Major Capital Project Impact on Operations**

Regulations promulgated under the Safe Drinking Water Act together with normal aging of facilities built in the 1920's and 1930's have had a significant impact on the cost of water treatment operations. \$24.4 million was spent on capital upgrades and additions needed to meet Federal and State water quality and environmental safety regulations during 2002. An additional \$10.8 million is budgeted for 2003.

Redevelopment of Stapleton Airport and Lowry Air Force Base continues to have substantial impact on capital and operation and maintenance budgets. Stapleton Airport was closed in 1995 upon the opening of the new Denver International Airport. Lowry was decommissioned and the former base made available for redevelopment in September 1994. Anticipated additional operation and maintenance costs for 2003 are estimated at \$52,146. Future capital and operation and maintenance expenditure projections depend on the development schedule for these areas.

The new Recycled Water Plant began construction in 2000 and is expected to become operational in 2004. The plant supervisor and assistant supervisor were hired in 2001 to assist with operational design work at a cost of \$69,000. Two lead technicians were hired in 2002. An additional fourteen water treatment technicians and a laborer are budgeted for 2003 at \$414,000. Total payroll for 2003 is budgeted at \$595,000. First year operation and maintenance costs for 2004 are projected to be \$2.7 million.

A new headquarter complex at Winter Park will be completed in 2003 at a cost of \$4.6 million.

A number of read and bill and master meter areas are expected to convert to total service contracts over the next several years due to new water testing regulations by the EPA.

#### Capital

Capital expenditures for 2002 totaled \$119,794,000; \$6.2 million more than budgeted. This overrun is substantially due to changes in scheduling for the Recycled Water Plant and Distribution systems construction of \$2.3 million and Wynetka Decentralization replacement property acquisition of \$1.9 million.

Total 2003 budgeted capital expenditures are \$123,465,000. Major construction projects include \$39.5 million for the construction of the Recycled Water Plant to receive and treat effluent from the Metro Sewer Plant to serve non-potable customers. An additional \$14.4 million for construction of pumping, storage and a dual distribution system are also included in this project. Phases I and II consisting of 6,600 acre-feet of supply and 30 million gallons per day of treatment began construction in 2001 with completion scheduled for February 2004.

A complete upgrade and renovation of Filter Plant 1 at Marston began in 2000 is scheduled for completion in 2003. Budgeted capital expenditures for 2003 are \$10.7 million.

Installation of equipment to implement automated meter reading throughout the Denver Water service area is budgeted at \$10.9 million for 2003. This project began in 2001 and is expected to be completed over a five-year period.

A list of major 2003 capital projects is shown on page 52. Additional detail information may be found on pages 54 through 66.

### **Capital Financing**

Capital projects are financed through a mixture of Participation receipts, System Development Charges and Reimbursements for relocations of water facilities as a result of highway and other construction, debt, reserves and other sources.

Approximately \$25.9 million of 2003 capital expenditures are shared with water distributors and others in the metropolitan area through participation contracts and System Development Charges See Section 2, Receipts Forecast, page 35. and Crosswalks of 2003 budgeted Receipts related to Capital and Operating Expenditures by type of expenditures and by Drought, rebates, fire and normal operations categories on pages 19 and 21 for additional information.

# MAJOR 2003 CAPITAL PROJECTS (Thousands of Dollars)

	2003 Capital Budget
PROGRAM: RAW WATER	
Hayman Fire Related Projects: Cheesman Reservoir - Sedimentation Property Line - Goose Creek & Turkey Creek - Permitting began in January, 2003 for Goose Creek. Construction anticipated to be complete in April, 2003. Turkey Creek construction anticipated to begin May, 2003. Construction anticipated to be complete in August, 2003.	1,104
South Platte - Sedimentation - Horse, Spring & Buffalo Creeks. Evaluating alternatives. Total Hayman Fire Related Projects:	<u>644</u> 1,748
<b>Gross Reservoir - New inlet gates on outlet works -</b> Install a new slide gate at the outlet works. The gate will provide upstream control of the outlet works. Fabrication started July, 2001. Completion of fabrication and construction anticipated for November, 2003. Completion anticipated July, 2004.	2,325
<b>Gross Dam Hydro Unit -</b> Install hydroelectric unit to generate clean power, produce income and meet FERC requirements. Purchase of equipment anticipated in 2003. Construction anticipated to begin in 2003. Completion anticipated October, 2004.	1,320
<b>Williams Fork Hydropower -</b> Replace the runners at the Roberts Tunnel and Williams Fork Hydros and the outdated switchgear and control equipment in the Williams Fork powerhouse. Construction began May, 2002. Completion anticipated April, 2003.	1,100
<b>Moffat Collection System - New headquarters facility -</b> To replace existing headquarters at the Winter Park Ski area. Construction began June, 2002. Completion anticipated July, 2003.	2,627
PROGRAM: RECYCLED WATER	
Recycled Water Project - Includes design and construction of a treatment plant to receive and treat effluent from the Metro Sewer Plant to served recycled water to customers. Pumping, storage facilities and a dual distribution system are also included in this project. Phase I - Project design started January, 1999 with construction beginning January, 2001. Completion date is anticipated for July, 2004.	39,521
<b>Recycled Distribution System</b> - Conduits 303 (Westerly Creek), 304, 305 and 301. Construction began January, 2003. Completion date is anticipated for December, 2003.	14,407
PROGRAM: WATER TREATMENT	
<b>Marston Modifications</b> - Complete upgrade and renovation of Filter Plant 1 at Marston. The renovation will add 65 MGD to plant capacity. Construction began March, 2001. Completion date anticipated for July, 2003.	10,725
PROGRAM: DELIVERY	
<b>Drought Related Projects:</b> Chatfield Reservoir to Conduit 20 - Design and construct a 30" pipeline to connect to the pump station and Conduit 20. Construction began January, 2003. Completion date is anticipated for February, 2003.	1,105
Capture Strontia Fish Flow & Water to deliver to Conduit 20 from Kassler Pump Station - Refurbish diversion dam to divert up to 45 CFS from the S. Platte into Conduit 20 to Platte Canyon Reservoir or deliver water to Conduit 20. Began construction in August, 2002. Completion date is anticipated for May, 2003.	1,160

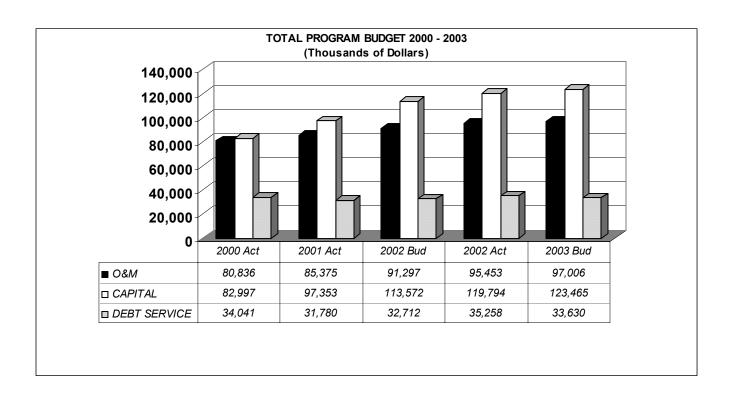
	Capital Budget
PROGRAM: DELIVERY (Continued) Drought Related Projects (Continued)	
Marston T.P Filtration System Improvements related to the drought. Part of Marston modifications, anticipated completion is for July, 2003.	500
Kassler - Re-roof Pump Station. Construction began in November, 2002. Completion date is anticipated for February, 2003.	38
Capital Hill P.S Replace #3 Pump, Motor and MCC with New Variable Frequency Drivers - Increase pump flow up to 20 MGD and discharge head of 5,540 or 5.650 to meet demand. Construction began August, 2002. Completion date is anticipated for May 28, 2003.	265
Grasmere Lake - Lake Lining - Design anticipated to begin March, 2003. Completion date is anticipated for December, 2004.	30
Eleven Mile Dam - Outlet Works Renovations - Construction began in January, 2003. Completion date is anticipated for July, 2004.	2,000
Total Drought Related Projects	5,098
New Conduit Construction - Mains 24" in size.	2,369
<b>Automated Meter Reading -</b> Installation of equipment for implementation of automated meter reading throughout the entire Denver Water service area. The unit costs per meter are about \$200. Installation began March 1, 2001 with 29, 021 completed in 2001, 53,144 completed in 2002, 78,710 anticipated in 2003 with 40,261 remaining for 2004 and 2005.	10,963
<b>Main improvements and replacements -</b> Includes installation of new mains for looping and other systems improvements and replacement of deteriorated, obsolete and leaking mains under 24" in diameter. Also includes fire hydrant and valve additions and replacements. Continuous program.	5,437
PROGRAM: GENERAL PLANT	
<b>Motor Vehicles &amp; Heavy Equipment -</b> 4 new & 14 replacement vehicles; 1 new & 3 replacement heavy equipment purchases.	937
<b>New computer Systems and hardware -</b> Centralized computer hardware is budgeted at \$2.6 million, centralized software \$524,000, PCs and related equipment at \$315,000, area network at \$142,000 and capitalized computer systems at \$3.8 million including \$2.1 million for the new Customer Billing System.	7,305
ALL OTHER CAPITAL EXPENDITURES*	6,560
TOTAL 2003 CAPITAL BUDGET BEFORE SUPPORTING ACTIVITIES <sup>(1)</sup>	112,442
SUPPORTING ACTIVITIES	11,023
TOTAL 2003 CAPITAL BUDGET*	123,465

<sup>&</sup>lt;sup>(1)</sup>Note: There are 233 projects in the 2003 Capital Work Plan. The 21 projects shown constitute 94% of the budget for total projects before the addition of supporting activities to Capital. \*Includes the historical timing adjustment of \$8,000

### **Program Budget Expenditures Summary**

The graph below shows the historical trend of operation and maintenance, capital and debt service expenditures summarized by program on page 55. Increases in operation and maintenance expenditures reflect continued increasing costs for water treatment, service line repairs and environmental compliance related activities and the unexpected impacts noted on page 49.

The high level of capital expenditures in 2003 reflects \$53.9 million for design and construction of the Recycled Water Plant and Distribution System projects, \$10.7 million for Marston Treatment Plant upgrades to comply with Federal and State regulations, \$10.9 million for Automated Meter Reading and \$7.3 million for new computer system and hardware. The 2002 decrease from budget was substantially due to delays concerning relocation of the Winter Park Headquarters of \$1.0 million; design of Gross Reservoir Outlet Works of \$2.3 million, Gravel Pit construction of \$1.3 million and new Customer Billing System of \$2.0 million.



# Program Expenditures Summary 2000-2003 (Thousands of Dollars)

Program Elements	_	2000 Actual	_	2001 Actual	_	2002 Budget	_	2002 Actual	_	2003 Budget
Operation and Maintenance Programs:										
Raw Water	\$	11,949	\$	13,576	\$	13,781	\$	17,550	\$	14,080
Recycled Water		7		0		541		300		1,746
Water Treatment		17,198		17,894		18,494		18,083		18,170
Delivery		40,291		41,355		46,292		44,462		50,454
General Plant	_	11,391	_	12,550	_	12,189	_	15,058	_	12,556
Total Operation &										
Maintenance Programs	\$	80,836	\$	85,375	\$	91,297	\$	95,453	\$	97,006
Less: Allocated										
Supporting Activities	\$_	40,017	\$_	41,686	\$_	46,204	\$_	45,601	\$_	47,458
Total O & M Before										
Supporting Activities	\$_	40,819	\$_	43,689	\$_	45,093	\$_	49,852	<b>\$</b> _	49,548
Capital Programs:										
Raw Water	\$	31,173	\$	10,721	\$	21,484	\$	15,341	\$	18,371
Recycled Water		1,987		15,908		28,796		31,467		54,898
Water Treatment		16,078		29,527		26,157		27,330		14,682
Delivery		25,860		29,735		31,728		30,724		32,177
General Plant		7,899		11,462		17,363		14,932		11,337
Historical Timing Adjustment	_		_		_	-11,956	_		_	-8,000
Total Capital Programs	\$	82,997	\$	97,353	\$	113,572	\$	119,794	\$	123,465
Less: Allocated										
Supporting Activities	\$_	9,310	\$_	9,750	\$_	9,955	\$_	10,711	\$_	11,023
Total Capital Before										
Supporting Activities	\$_	73,687	\$_	87,603	\$_	103,617	\$_	109,083	<b>\$</b> _	112,442
Subtotal Capital and										
O&M Before Supporting Activities	\$	114,506	\$	131,292	\$	148,710	\$	158,935	\$	161,990
Subtotal Supporting Activities										
Allocated to Capital and O&M	\$	49,327	\$	51,436	\$	56,159	\$	56,312	\$	58,481
Debt Service and Related Costs	\$	34,041	\$	31,780	\$	32,712	\$	35,258		33,630
Total Expenditures	\$_	197,874	\$_	214,508	\$	237,581	\$_	250,505	\$ <u></u>	254,101

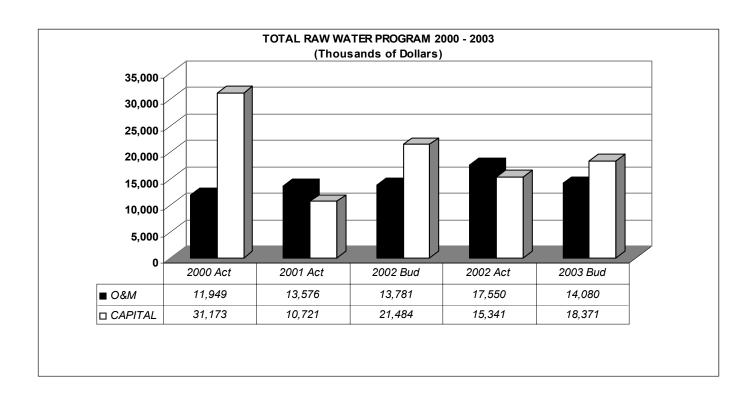
### **Raw Water Program**

This program contains all of the expenditures related to the operation and maintenance of raw water facilities from source to treatment such as collection systems, storage reservoirs, intakes, wells, ditches and canals. It also includes capital expenditures related to hydropower development, water rights acquisitions, ongoing raw water development, replacements and improvements to existing facilities and related activities. Total expenditures budgeted in 2003 for the Raw Water Program are \$32,451,000, comprised of \$14,080,000 for operation and maintenance and \$18,371,000 for capital.

Major 2003 capital expenditures includes installing a new slide gate at the inlet to the outlet works at Gross Reservoir to protect upstream control of the outlet works budgeted at \$2.3 million. Relocation of the Winter Park Headquarters facility are budgeted at \$2.6 million; Gross Dam Hydropower development at \$1.8 million and constructing sedimentation dams to control sedimentation flow into Cheesman Reservoir area as a result of the Hayman fire at \$1.7 million.

The graph below shows the historical trend of these expenditures. Operation and maintenance expenditures reflect the clean up and repair work in 2002 and 2003 resulting from the Hayman fire at \$2.9 million and \$398,000 respectively.

The largest 2000 increases were due to unbudgeted gravel pit and Leyden Gulch property acquisition of \$15.0 million and \$2.9 million, respectively. The table on page 57 provides more detail information.



# Program: Raw Water 2000-2003 (Thousands of Dollars)

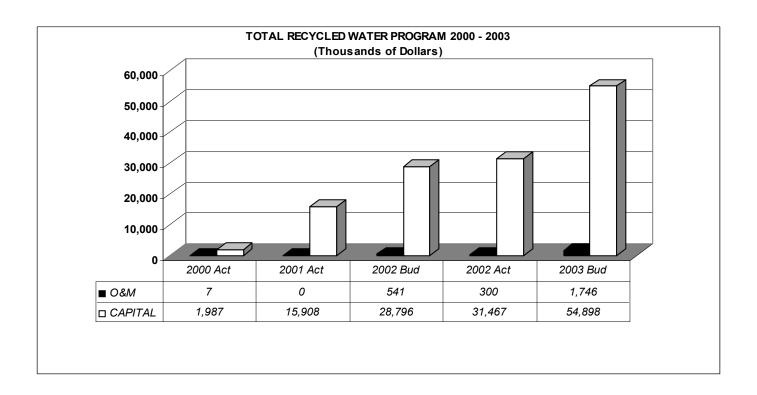
Program Elements	_	2000 Actual	_	2001 Actual		2002 Budget	_	2002 Actual	_	2003 Budget
Operation and Maintenance: Supervision and Engineering	\$	217	¢	298	¢	224	¢	205	¢	246
Storage Reservoirs	Ψ	2,108	Ψ	1,858	Ψ	1,983	Ψ	1,909	Ψ	2,057
Intakes, Wells, Ditches & Canals		840		851		1,036		926		902
Supply Mains & Collection Systems		1,035		1,027		1,127		1,049		984
Power Generation		445		583		494		575		488
Resource Development, Planning & Ctrl		594		852		916		787		1,022
Investigation & Development		426		566		197		287		147
Source Watershed Protection		120		215		250		185		225
Hayman Fire Rehabilitation		0		0		0		2,900		398
· <b>,</b>			_		-			,		
Subtotal	\$	5,785	\$	6,250	\$	6,227	\$	8,823	\$	6,469
Supporting Activities	_	6,164	_	7,326	_	7,554	_	8,727	_	7,611
Total Operation 9										
Total Operation & Maintenance	\$_	11,949	\$_	13,576	\$	13,781	\$_	17,550	\$_	14,080
Capital:										
Water Rights	\$	1,569	\$	1,801	\$	1,038	\$	711	\$	563
Hydropower Development -										
Gross Dam		129		248		1,482		270		1,759
Williams fork		161		53		213		82		300
Highlands		0		0		15		0		0
Winter Park Headquarters Relocation		54		300		2,672		1,645		2,627
Gravel Pit Storage (IRP Project)		15,550		956		1,717		1,500		1,470
Integrated Resource Planning		3,926		2,475		2,447		1,293		1,074
Gross ResOutlet Works Gates		0		591		2,735		436		2,325
Marston-Constr Multi Level Outlet Works		390		57		25		0		133
Hayman Fire Rehabilitation		0		0		0		8		1,748
Other Raw Water Improvements		3,855		976		1,427		1,997		705
Raw Water Modifications		0.540		4 004		4.000		F 440		2.047
and Replacements	_	3,540	-	1,394	-	4,666	_	5,413	_	3,017
Subtotal	\$	29,174	\$	8,851	\$	18,437	\$	13,355	\$	15,721
Supporting Activities	_	1,999	_	1,870	-	3,047	_	1,986	_	2,650
Total Capital	\$_	31,173	\$_	10,721	\$	21,484	\$_	15,341	\$_	18,371
Total Raw Water Expenditures	\$_	43,122	\$_	24,297	\$	35,265	\$_	32,891	\$_	32,451

### **Recycled Water Program**

This program includes the operation and maintenance and capital expenditures related to the recycling of water. Total 2003 expenditures for the Recycled Water Program are budgeted at \$56,644,000, comprised of \$1,746,000 for Operation and Maintenance and \$54,898,000 for capital.

Capital expenditures are for the design, engineering and construction of a treatment plant to receive and treat effluent from the Metro Sewer Plant and distribution system. These facilities will serve recycled water to customers for irrigation, cooling systems and similar purposes. Phase I design of the project began in 1998. The 2003 budget includes \$54.9 million including indirects for phase I that began in 2001 with the plant going online in 2004. Phase II construction to serve additional customers begins in 2006 and Phase III in 2009 with completion scheduled for 2012.

The graph below shows the Recycled Water Program from 2000 to 2003 with construction starting in 2001. The table on page 59 provides more detail information.



# Program: Recycled Water 2000-2003 (Thousands of Dollars)

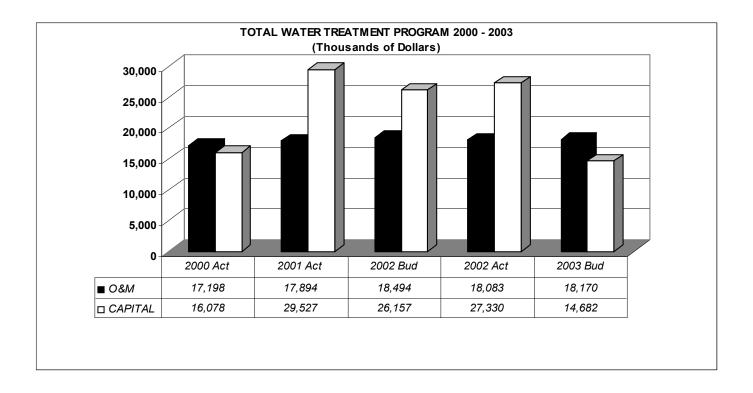
Program Elements	_	2000 Actual		2001 Actual	-	2002 Budget	_	2002 Actual	_	2003 Budget
Operation and Maintenance: Recycled Water Plant	\$	3	\$	0	\$	185	\$	122	\$	619
Subtotal	\$	3	\$	0	\$	185	\$	122	\$	619
Supporting Activities	_	4	-	0	-	356	_	178	_	1,127
Total Operation & Maintenance	\$_	7	\$	0	\$	541	\$_	300	\$_	1,746
Capital: Recycled Water Distribution System Recycled Water Plant	\$	44 1,763	\$	392 14,576	\$	5,110 23,213	\$	1,311 29,308	\$	14,407 39,521
Subtotal	\$	1,807	\$	14,968	\$	28,323	\$	30,619	\$	53,928
Supporting Activities		180	_	940		473		848		970
Total Capital	\$	1,987	\$	15,908	\$	28,796	\$	31,467	\$	54,898
Total Recycled Water Expenditures	\$	1,994	\$	15,908	\$	29,337	\$_	31,767	\$_	56,644

### **Water Treatment Program**

This program contains all expenditures related to the treatment of raw water, including operation and maintenance of the Moffat, Marston and Foothills water treatment plants and Quality Control Laboratory, as well as capital expenditures for improvements, modifications and replacements to existing treatment facilities. Total 2003 expenditures for the Water Treatment Program are budgeted at \$32,852,000, comprised of \$18,170,000 for operation and maintenance and \$14,682,000 for capital.

The major 2003 capital expenditure is the construction of upgrades and improvements to Filter Building 1 at Marston Treatment Plant budgeted at \$10.7 million. Approximately \$10.8 million, or 73% of the 2003 capital water treatment expenditures, are related to meeting Federal, State and local regulations.

The graph below shows the historical trend of these expenditures. The high level of capital expenditures for 2001 and 2002 reflect construction of disinfection facilities and other upgrades needed to meet Federal and State water quality regulations at Marston, Moffat and Foothills. The table on page 61 provides more detail information.



# Program: Water Treatment 2000-2003 (Thousands of Dollars)

Program Elements	_	2000 Actual		2001 Actual	-	2002 Budget	_	2002 Actual	_	2003 Budget
Operation and Maintenance:										
Supervision and Engineering	\$	235	\$	205	\$	310	\$	214	\$	298
Treatment Plants		8,092		8,402		8,380		8,106		7,668
Water Quality Laboratory	_	1,369	_	1,658	-	1,417	_	1,535	_	1,544
Subtotal	\$	9,696	\$	10,265	\$	10,107	\$	9,855	\$	9,510
Supporting Activities	_	7,502	_	7,629	-	8,387	_	8,228	_	8,660
Total Operation &										
Maintenance	\$_	17,198	\$	17,894	\$	18,494	\$_	18,083	\$_	18,170
Capital:										
Moffat Modifications & Improvements	\$	69	\$	29	\$	0	\$	0	\$	0
Moffat Disinfection Improvements		1,709		27		0		0		0
Marston Modifications & Improvements		2,557		10,057		18,197		18,504		11,396
Marston Solids Handling		12		0		0		0		0
Marston Disinfection Improvements		582		4		0		0		0
Foothills Modifications & Improvements		248		117		81		0		0
Foothills Solids Handling		0		0		0		0		0
Foothills Disinfection Improvements		8,808		15,486		4,795		5,946		0
Other Treatment Improvements	_	1,523	_	1,327	-	2,173	_	1,636	_	2,388
Subtotal	\$	15,508	\$	27,047	\$	25,246	\$	26,086	\$	13,784
Supporting Activities	_	570	_	2,480	-	911	_	1,244	_	898
Total Capital	\$_	16,078	\$	29,527	\$	26,157	\$_	27,330	\$_	14,682
Total Water Treatment										
Expenditures	\$_	33,276	\$	47,421	\$	44,651	<b>\$</b> _	45,413	\$	32,852

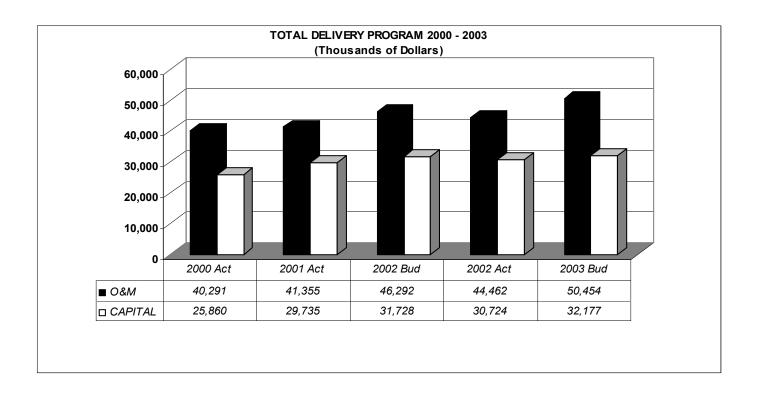
#### **Delivery Program**

This program contains all expenditures relating to the delivery of water from the treatment plants to customers, including such items as operation and maintenance of pumping facilities and treated water storage facilities, maintenance of transmission and distribution mains, service lines, fire hydrants, conservation activities, customer services, billing and collection. Total 2003 budgeted expenditures are \$82,631,000, comprised of \$50,454,000 for operation and maintenance and \$32,177,000 for capital. \$2.1 million of the capital expenditures will be reimbursed through participation receipts. (See page 36, Participation Receipts.)

Major 2003 capital expenditures include \$10.9 million for Automated Meter Reading, \$5.1 million for drought related construction and \$5.4 million for main improvements and replacements. Please see page 52 for specific drought related projects.

The major 2003 operation and maintenance expenditures were \$2.7 million for drought projects and \$2.9 million for rebates related to customers purchases of water saving toilets and clothes washers. 2002 expenditures for these items were \$1.4 million and \$162,000 respectively.

The graph below shows the historical trend of these expenditures. Capital expenditures for 2000 reflect construction of Colorow Reservoir and higher levels of main improvements and replacements for Denver International Airport and the Lowry Redevelopment than expected. The 2001 increase is primarily due to Conduit 138 construction and higher than expected main replacements. The increase is substantially due to the Automated Meter Reading project. The operation and maintenance increases for 2002 and 2003 are due to drought response measures. The table on page 63 provides more detail information.



# Program: Delivery 2000-2003 (Thousands of Dollars)

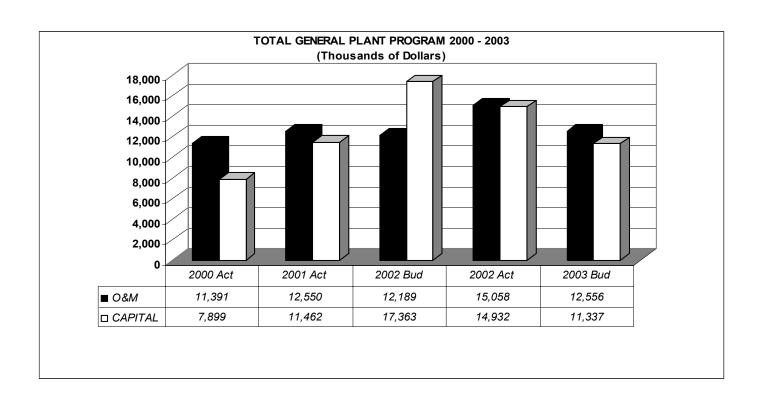
Program Elements	_	2000 Actual	_	2001 Actual	_	2002 Budget	_	2002 Actual	_	2003 Budget
Operation and Maintenance:										
Supervision and Engineering	\$	2,959	\$	2,846	\$	3,223	\$	2,871	\$	3,204
Pumping and Storage		3,378		3,917		3,454		3,096		3,271
Mains		3,843		4,355		4,551		4,745		4,505
Service Lines		181		187		806		177		171
Fire Hydrants Conservation:		499		516		605		631		589
Ongoing Activities		1,230		1,074		1,593		1,277		1,380
Drought Response		0		0		0		1,409		2,743
Rebates		0		0		0		162		2,962
Customer Services		5,772		6,146		6,547		6,651		6,523
Sprinkler & Domestic Service										
Connections, Decentralization Stations	_	1,098	_	1,031	_	1,373	_	1,278	_	1,048
Subtotal	\$	18,960	¢	20,072	¢	22,152	¢	22,297	¢	26,396
Subtotal	Ψ	10,900	Ψ	20,072	Ψ	22,132	Ψ	22,291	Ψ	20,390
Supporting Activities	_	21,331		21,283	_	24,140	_	22,165		24,058
Total Operation & Maintenance	•	40.004	<b>.</b>	44 055	•	46.000	•	44.400	•	EO 4E4
Maintenance	\$_	40,291	<b>a</b> _	41,355	<b>⊅</b> _	46,292	<b>a</b> _	44,462	Φ_	50,454
Capital:										
Pumping and Storage:										
Chatfield Pump Station	\$	290	\$	6	\$	0	\$	0	\$	0
Chatfield Reservoir - 5.0MGD		4		0		0		0		0
Colorow Reservoir		2,068		585		15		3		0
Diesel Engines/Var Frequency Mtrs		43		768		805		106		0
Other Pumping & Storage Total Pumping and Storage	\$	729 3,134	¢_	1,787 3,146	¢-	3,552 4,372	φ_	1,772 1,881	<u>_</u>	3,059
Total Fullipling and Storage	Ф	3,134	Ф	3,140	Ф	4,372	Ф	1,001	Ф	3,059
Conduit Construction	\$	524	\$	5,564	\$	1,081	\$	636	\$	2,369
Automated Meter Reading	-	1,608	-	6,229		11,080	-	11,322		10,963
Transmission & Distribution		13,880		10,670		10,194		10,514		5,437
Conservation:										
Xeriscaping & Sources for Parks		764		406		925		343		27
Drought Response	_	0		0	_	0	_	863	_	5,098
Subtotal	\$	19,910	\$	26,015	\$	27,652	\$	25,559	\$	26,953
Supporting Activities		5,950		3,720		4,076		5,165		5,224
Supporting Activities	_	0,000	_	5,720	-	7,070	_	5,105	_	J,ZZ+
Total Capital	\$_	25,860	\$_	29,735	\$_	31,728	\$_	30,724	\$_	32,177
Total Delivery Expenditures	\$_	66,151	\$_	71,090	\$_	78,020	\$_	75,186	\$_	82,631

### **General Plant Program**

This program contains all expenditures related to the operation and maintenance, construction and acquisition of general plant and equipment, including the Administration Building, West Side buildings and grounds, vehicles, heavy equipment, telemetering and computer-related items. Total 2003 expenditures budgeted for General Plant is \$23,893,000 comprised of \$12,556,000 for operation and maintenance and \$11,337,000 for capital.

Major 2003 capital expenditures include \$937,000 for purchase of motor vehicles and heavy equipment, and \$7.3 million for mainframe, personal computers, network equipment, new facilities mapping and other computer systems.

The graph below shows the historical trend of these expenditures. 2001 and 2002 include higher expenditures for the purchase of additional new computer systems and hardware. 2002 also includes purchase of property for relocation of Wynetka Decentralization Station. The table on page 65 provides more detail information.



# Program: General Plant 2000-2003 (Thousands of Dollars)

Program Elements	_	2000 Actual	_	2001 Actual	_	2002 Budget	_	2002 Actual	_	2003 Budget
Operation and Maintenance:										
West Side Complex	\$	1,412	\$	1,681	\$	1,638	\$	1,498	\$	1,866
Kassler Center		5		115		75		129		82
Motor Vehicle & Equipment		2,328		2,410		2,189		2,385		2,128
Radio System & Telemetering		1,489		1,365		1,280		1,630		1,450
Environmental Compliance		612		665		667		685		482
Safety & Security Related		0		330		0		1,798		25
Small Tools & Other Items	-	529	_	536	-	573	_	630	_	521
Subtotal	\$	6,375	\$	7,102	\$	6,422	\$	8,755	\$	6,554
Supporting Activities	_	5,016	_	5,448	-	5,767	_	6,303	_	6,002
Total Operation &										
Maintenance	\$_	11,391	\$_	12,550	\$_	12,189	\$_	15,058	\$_	12,556
Capital:										
West Side Complex	\$	1,299	\$	3,607	\$	2,420	\$	1,952	\$	379
Kassler Center		81		191		176		18		72
Decentralization Stations		20		0		38		1,882		10
Motor Vehicles & Heavy Equip		2,199		2,944		2,298		2,316		937
Computer Systems & Equipment		2,789		3,024		8,860		5,592		7,305
Communications, Office &										
Specialized Equipment		758		635		972		926		509
Control Instrumentation & Telemetering		92		16		370		100		246
Security Upgrades at Various Facilities		0		0		781		573		598
Other locations	-	50	-	305	-	0	_	105	_	0
Subtotal	\$	7,288	\$	10,722	\$	15,915	\$	13,464	\$	10,056
Supporting Activities	_	611	_	740	_	1,448	_	1,468	_	1,281
Total Capital	\$_	7,899	\$_	11,462	\$_	17,363	\$_	14,932	\$_	11,337
Total General Plant										
Expenditures	\$_	19,290	\$_	24,012	\$_	29,552	\$_	29,990	\$_	23,893

## **Supporting Activities**

Each of the major programs contains a program element called supporting activities. This is an allocation of general and administrative expenditures that are not directly related to a particular program. These supporting activities can be characterized as indirect expenditures. A detailed listing of all of the supporting activities and their subsequent allocation to capital and operation and maintenance categories, along with further allocation to each of the major programs, is contained below.

# Program Element: Supporting Activities 2003 (Thousands of Dollars)

	Total 2003	Allocated To					
	Budget	O & M		Capital			
Supporting Activities:							
Administration	\$ 23,646	\$ 19,189	\$	4,457			
Employee Benefits	32,820	26,634		6,186			
Warehouse - Yards	864	701		163			
Maintenance Shops	1,004	815		189			
Gen. Liability & Other Ins.	479	389		90			
Other*	-332	-270		-62			
Total Supporting Activitie	\$ 58,481	\$ 47,458	\$	11,023			

<sup>\*</sup> Includes Stores Issue and other adjustments including refunds to customers.

# Summary of Allocation Of Supporting Activities to Programs

	Raw Water	_	Recycled Water	Water Treatment	Delivery	General Plant	_	2003 Total
Operation \$	7,611	\$	1,127	\$ 8,660	\$ 24,058	\$ 6,002	\$	47,458
Capital	2,650	-	970	898	5,224	1,281	-	11,023
Total \$	10,261	\$	2,097	\$ 9,558	\$ 29,282	\$ 7,283	\$	58,481



The Hayman fire of 2002 affected 7,043 acres of Denver Water land at Cheesman Reservoir. Denver Water Transmission and Distribution crews have been reclaiming the area since the fire was contained in July. The work involves placement of straw bales in gullies to slow down run-off and prevent soil erosion, and breaking up the top layer of soil to allow moisture to permeate the ground. The area also has been re-seeded to encourage re-vegetation.

# **Section 4 - Expenditures by Type of Expenditure**

## **Type of Expenditure Summary**

In this section, total 2003 budgeted expenditures of \$254,101,000 have been placed into categories that describe what these expenditures purchase. Each category accumulates expenditures for the particular type of purchase regardless of program or whether the expenditure is for operation and maintenance or for capital.

Page 70 of this section provides summary data for expenditures by type. Pages 71 through 83 provide detailed information on the number of employees and history of divisional explanations. The following is a brief description of each of the line items appearing on page 70.

#### **Gross Payroll**

Budgeted 2003 gross payroll is \$59,135,000, an increase of \$12,000 over 2002 actual gross payroll. The small increase reflects an average overall budgeted wage and salary increase of 2.0% that went into effect January 2003 and budgeting for twenty-two unfilled and twenty-five net new regular positions, substantially offset by increased vacancy savings requirements as a result of the extended drought and overtime reduction.

The authorized 2003 proposed regular and introductory number of employees of 1,087.1 is 24.7 more than authorized for 2002. This is 21.9 positions less than the high point of 1,109 authorized in 1991. Fifteen new positions were added in the Operation and Maintenance Division to provide additional staffing for the new Recycled Water Plant. Seven positions were added to the Water Quality, Environmental Compliance, Emergency Service and Instrumentation & Control Systems areas. The Public Affairs division added four customer service positions. Four positions related to the meter reading function were deleted as a result of the new Automated Meter Reading project. One new Manager of Geospatial I. T. was added to Engineering Division and one new planner was added to the Planning Division. The 2003 Budget also includes 35 temporary employee positions for monitoring water use by customers and related administration work. Please see page 77 for a complete list of all positions additions and deletions.

A summarized organization chart that shows reporting relationships can be found on page 75. A comparison of authorized 2002 and 2003 number of employees for regular, introductory, temporary, project, casual and part-time employees are shown on page 72.

#### **Employee Benefits**

Employee benefits for 2003 are budgeted at \$23,926,000, an increase of \$1,635,000 over actual 2002. The increase is substantially due to an increase of \$1,267,000 for the Defined Benefit Retirement plan, reflecting the payroll increase, and reduced income from investments and \$763,000 for Health Insurance, partially offset by a decrease for Workers Compensation.

#### **Materials and Supplies**

Budgeted 2002 materials and supplies are \$21,456,000; a decrease of \$2.8 million from 2002. This is substantially due to a reduction in materials required for the Automated Meter Reading project, chemicals for treating water and several other projects and activities.

#### **Outside Services**

Budgeted outside services for 2003 total \$34,735,000, including utilities and power for pumping, professional (consultant), and other services.

The 2003 budget includes \$4,262,000 for utilities and pumping power a decrease of \$462,000 from 2002. This is substantially due to reduced pumping power needed in 2002 due to continued drought conditions and related restrictions.

The professional services budget of \$10,034,000 is a \$3.2 million decrease over 2002. The decrease is substantially due to the completion of the design phase of the new Recycled Water Plant and distribution facilities and other related projects of \$1.4 million and delays concerning the new CIS computer system of \$2.4 million. Proposed services include the costs of consulting services such as design engineering, auditing, outside legal services and other professional consultants.

Other services budgeted at \$20,439,000 for 2003 includes such items as computer software and maintenance, employee training, books and subscriptions, postage, equipment rental and contracted maintenance. The \$754,000 decrease over 2002 is substantially due to Hayman fire repair related services and water treatment, safety and security and other services required in 2003.

## **General Equipment**

Purchases of equipment during 2003 are budgeted at \$1,952,000, mostly for purchasing vehicles, heavy equipment and computer equipment. This is a \$1.3 million decrease over 2002 expenditures, primarily due to fewer vehicles and heavy equipment purchases anticipated in 2003.

#### **Construction Contract Payments**

This category includes payments for construction work and major material purchases under contract, purchase of water rights and acquisition of rights-of-way. These payments, budgeted at \$83,623,000 for 2003, are substantially due to Recycled Water Plant and Distribution systems construction of \$51.3 million, Marston treatment plant improvements of \$10.3 million, construction of new inlet gates on outlet works at Gross Reservoir of \$2.2 million, new headquarters facility at Winter Park of \$2.5 million, construction of a pipeline from Chatfield Reservoir to Conduit 20 of \$1,035,000 and construction of Conduit 151 of \$1.3 million.

#### Refunds

Refunds consist primarily of System Development Charges and customer refunds. The 2003 budget project refunds of \$343,000, a decrease of \$429,000 from 2002 actual. Refunds in 2002 were unusually high due to a \$474,000 refund to the City of Thornton regarding enlargement of the Metro Sewer Pump Station which has been determined as no longer being required.

#### **Debt Service**

Debt Service includes principal and interest payments for General Obligation and Refunding Bonds, Revenue Bonds, Certificates of Participation and the Wolford Mountain Reservoir capital lease. Debt Service for 2003 is budgeted to be \$33,405,000. See section 6, pages 88 - 92 for additional information. In the past Denver Water relied on General Obligation Bonds. However, in 2002 the City Charter was changed to remove Denver Water's authority to issue General Obligation Bonds. In the future, Denver Water will issue Revenue Bonds.

Total principal maturing and interest due in 2003 is as follows:

	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
General Obligation & Refunding Bonds	\$ 11,960,000	\$ 10,299,000	\$ 22,259,000
Revenue Bonds	0	800,000	800,000
Certificates of Participation	4,430,000	2,916,000	7,346,000
Wolford Mountain Reservoir Capital Leas	ses <u>955,000</u>	2,045,000	3,000,000
Total Dobt Comics	Ф 47 04E 000	¢ 40 000 000	Ф 22 40E 000
Total Debt Service	<u>\$ 17,345,000</u>	<u>\$ 16,060,000</u>	<u>\$ 33,405,000</u>

#### Other

Other includes such items as claims, taxes collected on meter and materials sales, adjustments and expenditures not included in the above categories. The (\$4,474,000) budgeted for 2003 includes a \$2,962,000 drought conservation rebate program for customer purchases of water saving toilets and clothes washing machines, and \$302,000 for other water conservation incentives. Reduction to the 2003 capital budget to reflect estimated Historical Timing Adjustment (HTA), of \$8,000,000. The 2003 HTA reduction is an estimate of budget variances resulting from changes in capital construction schedules and the timing of obtaining permits and acquiring rights-of-way. It is based on a comparison of actual to budgeted capital expenditures over several previous years.

# Comparison of Expenditures by Type of Expenditure 2000 - 2003 (Thousands of Dollars)

	-	2000 Actual	_	2001 Actual	-	2002 Budget	_	2002 Actual	_	2003 Budget
Gross Payroll	\$	51,716	\$	54,562	\$	58,493	\$	59,123	\$	59,135
Employee Benefits		16,963		18,904		20,778		22,291		23,926
Materials and Supplies		17,071		21,640		24,940		24,306		21,456
Outside Services:										
Utilities & Pumping Power	\$	4,385	\$	5,508	\$	4,466	\$	4,724	\$	4,262
Professional Services		10,063		13,197		9,117		13,231		10,034
Other Services	-	16,109	_	18,990	_	22,268	_	21,193	-	20,439
Subtotal Outside Services	\$	30,557	\$	37,695	\$	35,851	\$	39,148	\$	34,735
General Equipment		2,538		3,265		4,016		3,237		1,952
Construction Contract Payments		45,622		47,823		71,806		67,920		83,623
Refunds		387		1,038		428		772		343
Debt Service		34,026		31,449		32,543		35,194		33,405
Other		(1,006)		(1,868)		(11,274)		(1,486)		(4,474)
Total Expenditures	\$	197,874	\$_	214,508	\$	237,581	\$_	250,505	\$	254,101



Denver Water Transmission and Distribution crews have been working the land adjacent to Cheesman Reservoir that was burned in the 2002 Hayman fire. Workers have been "contour felling" trees destroyed by the fire. Trees are cut and placed perpendicular to the slope of the land, in efforts to slow soil erosion. Workers have also constructed straw-bale "dams" to protect the area from erosion. The bales are anchored by four-foot stakes driven into the ground. The work is expected to continue through April 2003.

## Section 5 - Organization

Denver Water is governed by the Board of Water Commissioners. The five Water Commissioners are appointed by the Mayor of Denver to staggered six-year terms. The Manager of Denver Water is appointed by the Board and is "discretionary." In general, "discretionary" means that the Manager holds "executive discretion" and serves solely at the pleasure of the Board. The Manager appoints the Division Directors, who manage the divisions. The Directors also are discretionary and report directly to the Manager.

Organizationally, Denver Water is divided into seven divisions, which are then further defined into sections. The 2002 budgeted Table of Organizations shown on page 72. Divisional summaries for the number of employees and expenditures by division are shown on pages 76 through 82.

# Regular and Introductory Employees by Division Regular and Introductory Employees (As of December 31, 2000 – 2003)

Division	2000 <u>Actua</u> l	2001 <u>Actual</u>	2002 <u>Budget</u>	2002 <u>Actual</u>	2003 <u>Budget</u>
Manager & Staff	86.0	91.8	100.0	97.8	104.0
Public Affairs	145.1	151.8	155.7	149.3	150.4
Legal	13.5	13.5	13.6	13.5	13.6
Finance	56.0	56.0	56.0	55.0	56.0
Engineering	127.0	131.0	134.0	134.0	135.0
Planning	42.4	41.4	44.1	42.4	45.1
Operations &					
Maintenance	<u>535.5</u>	<u>540.5</u>	<u>559.0</u>	<u>544.0</u>	<u>583.0</u>
Totals	1,005.5	1,026.0	1,062.4	1036.0	1087.1
Authorized	1,046.1	1,060.1	1,062.4	1062.4	1087.1
Difference	-40.6	-34.1	N/A	-26.4	N/A
		3	,, .	_0	,, .

# 2003 Budgeted Table of Organization (Comparison with 2002)

	Regi	ular-Intro	ductory	Staff	2003	Project S	oject Staff			
	2002	2002	2003	Change in	Temp	Temp-	Proj -		Budget	
Divisions/Sections	Actual	T. O.	T. O.	T.O.s	Drought	orary	Temp	Time	Total	
Manager & Staff Division										
Manager and Staff	13.0	13.0	13.0	-	-	-		-	-	
Information Technology	57.8	60.0	64.0	4.0	-	-	3.0	-	3.0	
Human Resources	27.0	27.0	27.0	0.0	0.0	0.0	2.6	1.0	3.6	
Total Manager & Staff										
Division	97.8	100.0	104.0	4.0	0.0	0.0	5.6	1.0	6.6	
Public Affairs Division										
Director of Public Affairs	7.0	7.0	7.0	0.0	-	-	-	-	-	
Community Relations	4.7	4.6	4.8	0.2	1.2	-	-	1.0	2.2	
Conservation	10.0	7.0	10.0	3.0	1.0	-	-	-	1.0	
Print Shop *	3.0	4.0	0.0	-4.0	-	-	-	-	-	
Central Services	3.0	3.0	3.0	0.0	-	-	-	-	-	
Customer Services - Office	28.0	28.5	32.0	3.5	8.0	-	-	-	8.0	
Customer Services - Field	83.0	88.0	82.0	-6.0	25.0	-	-	-	25.0	
Sales Administration	10.6	13.6	11.6	-2.0		-	-		-	
Total Public Affairs										
Division	149.3	155.7	150.4	-5.3	35.2	0.0	0.0	1.0	36.2	
Legal Division	13.5	13.6	13.6	0.0	-	0.0	-	2.0	2.0	
Finance Division										
Director of Finance	9.0	9.0	9.0	0.0	-	-	-	-	-	
Treasury Operations	5.0	5.0	5.0	0.0	-	-	-	-	-	
Fiscal Planning & Performance	4.0	5.0	5.0	0.0	-	-	-	-	-	
Purchasing	8.0	8.0	8.0	0.0	-	-	-	-	-	
Accounting	19.0	19.0	19.0	0.0	-	-	-	1.0	1.0	
Rate Administration	2.0	2.0	2.0	0.0	-	-	-	-	-	
Records & Document Admin.	8.0	8.0	8.0	0.0		-	2.0		2.0	
Total Finance Division	55.0	56.0	56.0	0.0	0.0	0.0	2.0	1.0	3.0	
Engineering Division										
Administration	9.0	8.0	9.0	1.0	_	_	_	_	_	
Programs & Projects	37.0	37.0	37.0	0.0	_	4.0	_	_	4.0	
Survey	26.0	26.0	26.0	0.0	_	2.0	_	6.0	8.0	
Distribution	39.0	40.0	40.0	0.0	_	1.0	1.0	7.0	9.0	
Construction Management	23.0	23.0	23.0	0.0	_	1.0	4.0	-	5.0	
Total Engineering									0.0	
Division	134.0	134.0	135.0	1.0	0.0	8.0	5.0	13.0	26.0	

# 2003 Budgeted Table of Organization (Comparison with 2002)

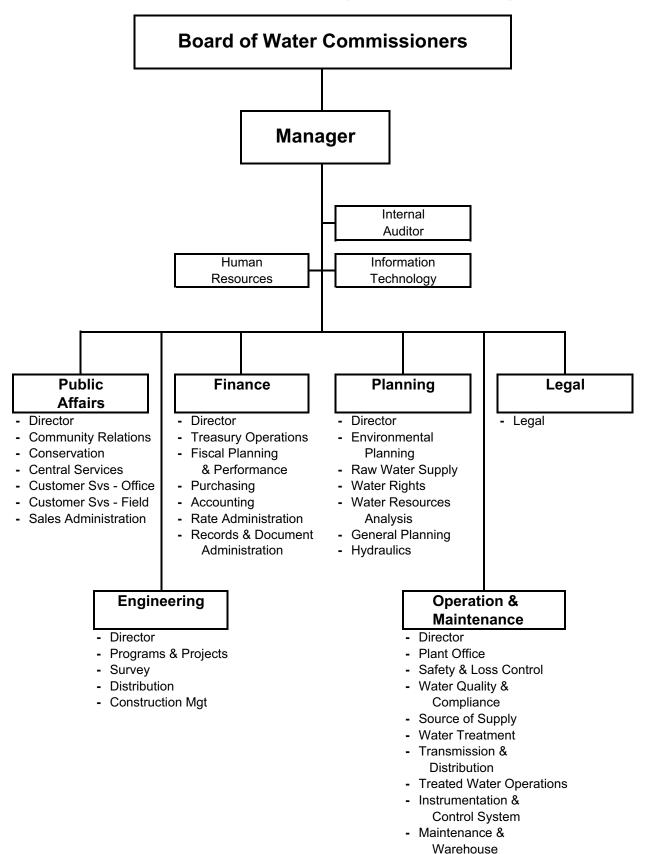
	Regular-Introductory Staff 2003 Temporary and Project St						taff		
				Change	)			Casual	
	2002	2002	2003	in	Temp	Temp-	Proj	Part-	Budget
Divisions/Sections	Actual	T. O.	T. O.	T.O.s	Drought	orary	Temp	Time	Total
Planning Division									
Director of Planning	3.0	3.0	4.0	1.0	-	-	-	-	-
Environmental Planning	4.6	4.6	4.6	0.0	-	-	-	-	-
Raw Water Supply	6.0	6.0	6.0	0.0	-	-	-	1.0	1.0
Water Rights	7.0	7.5	7.5	0.0	-	-	-	-	-
Water Resources Analysis	10.8	11.0	11.0	0.0	-	1.0	-	-	1.0
General Planning	4.0	5.0	5.0	0.0	-	-	-	-	-
Hydraulics	7.0	7.0	7.0	0.0		-	-	5.0	5.0
Total Planning Division	42.4	44.1	45.1	1.0	0.0	1.0	0.0	6.0	7.0
Operations and Maintenance									
Division									
Plant Office	5.0	5.0	5.0	0.0	-	-	-	-	-
Water Quality & Compliance	30.0	31.0	33.0	2.0	-	2.0	-	1.0	3.0
Safety and Loss Control	12.0	12.0	12.0	0.0	-	-	-	-	-
Source of Supply	60.0	62.0	62.0	0.0	-	17.0	2.0	-	19.0
Water Treatment	69.0	72.0	87.0	15.0	-	2.0	-	-	2.0
Transmission & Distribution	163.0	166.0	169.0	3.0	-	1.0	-	4.0	5.0
Treated Water Operations	58.0	60.0	61.0	1.0	-	-	-	3.0	3.0
Instrumentation & Ctrl Systems	20.0	18.0	21.0	3.0	-	-	-	-	-
Maintenance and Warehouse	127.0	133.0	133.0	0.0		-		12.0	12.0
Total Operations &									
<b>Maintenance Division</b>	544.0	559.0	583.0	24.0	0.0	22.0	2.0	20.0	44.0
Total All Divisions	1,036.0	1,062.4	1,087.1	24.7	35.2	31.0	14.6	44.0	124.8

<sup>\*</sup> Print Shop was transferred to Manager & Staff division, Information Technology section on January 1, 2003.

## 2003 - 2002 Budgeted Table of Organization Changes

Divisions/Positions	Net Change
2. Molene M. Goldono	<u> </u>
Manager & Staff Division	
Print Shop - Transfer of positions from Public Affairs division.	4.0
	4.0
Public Affairs Division	
Print Shop - Transfer positions to Information Technology	-4.0
Community Affairs Specialist (Community Relations) - Reg. Part-time .6 to .8	0.2 1.0
Customer Services Rep I - NEW (Customer Services - Office) Customer Services Rep II - NEW (Customer Services - Office)	2.0
Customer Services Rep II - NEW (Customer Services - Office) - Regular Part-time	0.5
Meter Repairer - NEW (Customer Services - Field)	1.0
Meter Readers - DELETE (Customer Services - Field)	-4.0
Administrative Asssistant III =- Transfer from Sales Admin. To Transmission & Distribution)	-3.0
Administrative Assistant III - NEW (Sales Admin.)	1.0
	-5.3
Legal Division	0.0
No change in positions	0.0
Finance Division	
No change in positions	0.0
	0.0
Engineering Division	4.0
Manager of Geospatial I. T NEW (Engineering Administration)	1.0
Planning Division	1.0
Planner I - NEW (Director of Planning)	1.0
	1.0
Operations and Maintenance Division	
Water Qulaity Investigator II - NEW (Laboratory)	1.0
Laborer - NEW (Environmental Compliance)	1.0
Lead Water Treatment Technicans - NEW (Recycling Plant)	3.0
Water Treatment Tech I - NEW (Recycling Plant) Water Treatment Tech II - NEW (Recycling Plant)	5.0 6.0
Laborer - NEW (Recycling Plant)	1.0
Administrative Asssistant III =- Transfer from Sales Admin. To Transmission & Distribution)	3.0
Service Worker I - NEW (Emergency Services)	1.0
Instrument Technicians - NEW (Instrumentation & Control Systems)	2.0
Process Control Technician - NEW (Instrumentation & Control System)	1.0
Staff Analyst I - NEW (Maintenance)	1.0
Assistant Superintendent - DELETED (Maintenance)	-1.0
T ( I D   W   O)	24.0
Total Position Changes	24.7

# 2003 Denver Water Summary Table of Organization



#### **Manager and Staff Division Summary**

#### **Activities**

This Division includes the Manager as Chief Executive for Denver Water. The Manager is also Secretary to the Board of Water Commissioners and custodian of all records. The six Division Directors report directly to the Manager. This Division also includes the Human Resources Section, Information Technology Section, and the Internal Auditing function. Human Resources is responsible for administering all aspects of Denver Water's employment, training, and compensation systems. Human Resources maintains Denver Water's Personnel Policies, is custodian of personnel records, administers the employee benefits, risk management, health promotion, disability management, and workers compensation programs. Human Resources is also responsible for recruitment and hiring, training, investigating employee complaints and administering programs related to small and disadvantaged businesses. The Information Technology Section is responsible for electronic communication, information systems, acquisition and maintenance of central computers and computer networks, telephone systems, information system management, purchase and support of personal computers, printers, and related equipment.

#### Key 2003 Objectives (See also Performance Measures)

- 1. In response to current drought, advocate and implement conservation and water use limitations and, where appropriate, seek additional water supplies.
- Work to maintain existing water supply sources to serve Denver and combined service areas. Work to enhance supply options in order to serve the build-out of Denver and combined service areas. Cooperate with other regional water providers to better enable them to supply water to their customers, and enhance the supply available to Denver Water.
- 3. Maintain or improve existing relationships with water providers and distributors in the metropolitan area through the IRP and other cooperative methods and with water utilities and providers elsewhere in the region.
- 4. Monitor environmental and regulatory developments on the national and regional scene, and implement policy and operational changes where necessary to assure that Denver Water remains in compliance with all applicable laws.
- 5. Insure that Denver Water is managed in a cost effective, secure, efficient and customer-friendly manner.
- 7. Insure that the human resources of Denver Water are hired, managed, developed and retained in a manner that contributes to the effective and efficient operations of the Department and that reflects the diversity of the community in which we live.
- 8. Maintain all information systems so that information is provided in a timely and accurate fashion.
- Install and maintain information system hardware and software for financial, geographic information, facility management, accounting, warehousing and purchasing, and customer information systems, and insure that such systems are adequately maintained and upgraded as necessary.
- 10. Connect remote sites to the central data systems.
- 11. Maintain the computer and network infrastructure to support the growing volume of data traffic.
- 12. Maintain and enhance computer security as needed to meet Denver Water's business objectives.
- 13. Improve operational efficiencies and reduce costs by deploying technology solutions.
- 14. Operate a print and graphics shop.

#### Regular & Introductory Employees (At End of Year)

	2000	2001	2002	2002	2003
Section	Actual	Actual	Budget	Actual	Budget
Manager and Staff	13.0	13.0	13.0	13.0	13.0
Human Resources	25.0	25.0	27.0	27.0	27.0
Information Technology*	48.0	53.8	60.0	57.8	64.0
Total	86.0	91.8	100.0	97.8	104.0

<sup>\*</sup> Four programmers from Records and Document Administration section and one IT manager position from the Director of Finance were transferred to the IT section at the beginning of 2002. The Print Shop section with four positions was transferred from Public Affairs Division January, 2003.

	2000	2001	2002	2002	2003
	Actual	Actual	Budget	Actual	Budget
Payroll	\$ 6,310	6,895	7,915	8,024	8,525
Employee Benefits	8,270	10,068	11,018	10,724	11,085
Materials	1,600	1,637	1,521	1,152	915
Services	7,931	8,046	12,922	10,923	12,026
Equipment	39	212	1,317	486	672
Refunds	1	3	2	1	1
Other	 13	8	40	20	40
Total	\$ 24,164	26,869	34,735	31,330	33,264

#### **Public Affairs Division Summary**

#### **Activities**

The Public Affairs Division facilitates relationships with persons and entities outside of Denver Water. In that capacity, it responds to customer concerns and manages customer relations, maintains cooperative relationships with Denver City administration and governmental agencies whose sphere of operation affect Denver Water. They coordinate the administration of distributor contracts and facilitate Denver Water's relations with its various publics. Their responsibilities also include customer billing, meter reading and maintenance, water conservation, plan review, public relations activities.

#### **Key 2003 Objectives (See also Performance Measures)**

- 1. Plan, prepare, and deliver drought messages to our customers.
- 2. Selection and purchase of a new Customer Information System (CIS).
- 3. Continue radio drive-by automation of meters.
- 4. Manage customer consumption through the current drought.

#### Regular & Introductory Employees (At End of Year)

	2000	2001	2002	2002	2003
Section	Actual	Actual	Budget	Actual	Budget
Director of Public Affairs	7.0	7.0	7.0	7.0	7.0
Community Relations	4.5	4.7	4.6	4.7	4.8
Conservation	6.0	7.0	7.0	10.0	10.0
Customer Services	108.0	112.5	116.5	3.0	114.0
Sales Administration*	12.6	13.6	13.6	111.0	11.6
Print Shop**	4.0	4.0	4.0	10.6	N/A
Central Services	3.0	3.0	3.0	3.0	3.0
Total	145.1	151.8	155.7	149.3	150.4

<sup>\*</sup> The cashiering function was closed April 2000. Three positions in the Locates Section were transferred to T&D in 2002.

		2000	2001	2002	2002	2003
		Actual	Actual	Budget	Actual	Budget
Payroll	\$	6,002	6,219	6,442	6,705	6,908
Materials		1,953	6,047	10,448	10,626	9,694
Services		2,092	2,771	5,135	4,603	5,544
Equipment		12	19	0	0	0
Contract Payments		0	1	0	0	0
Refunds		208	407	324	194	240
Other*		0	0	0	148	3,264
Total	\$ _	10,267	15,464	22,349	22,276	25,650

<sup>\*</sup>Increase reflects rebate program for water conservation and water use efficiency programs.

<sup>\*\*</sup> The Print Shop section with four positions was transferred to the Manager & Staff division, information Technology section in January, 2003.

#### **Legal Division Summary**

#### **Activities**

The Legal Division represents and gives legal advice to the Board of Water Commissioners, the Manager and the various Divisions of Denver Water and handles all of its litigation. The types of litigation include water rights cases and diligence proceedings, administrative proceedings before State and Federal agencies, contract, civil rights and negligence cases, property suits and condemnations, and actions to recover Board charges and damages for injury to Board property and rights. In addition, the Legal Division represents Board interests in administrative hearings and appeals within Denver Water relating to personnel problems and customer complaints, reviews and advises upon matters of pending legislation, and prepares and reviews contract documents of all kinds.

#### **Key 2003 Objectives (See also Performance Measures)**

- 1. Respond to evolving challenges to the yield and operating flexibility of Denver Water's system, including challenges presented by various permitting processes and water court proceedings.
- 2. Improve personnel-related practices and policies, including benefits, risk management, corrective action and medical issues.
- 3. Examine methods of protecting the urban reach of the South Platte River, including water court proceedings, water delivery, water quality protections and intergovernmental agreements.
- 4. Provide legal interpretation, drafting and negotiations services as needed to help Denver Water manage its operations under drought conditions.

Regular & Introductory Employees (At End of Year)

Regular & Introductory Employees (At L	-iid Oi i eai j				
	2000	2001	2002	2002	2003
Section	Actual	Actual	Budget	Actual	Budget
Legal	12.9	13.5	13.6	13.5	13.6
Total	13.5	13.5	13.6	13.5	13.6

	2000	2001	2002	2002	2003
	Actual	Actual	Budget	Actual	Budget
Payroll	\$ 861	956	994	1,035	1,019
Materials	10	4	5	2	4
Services	1,446	963	724	277	414
Equipment	0	0	0	0	0
Contract Payments	0	32	0	0	0
Other	261	279	600	277	350
Total	\$ 2,578	2,234	2,323	1,591	1,787

#### **Finance Division Summary**

#### **Activities**

The Finance Division is responsible for the planning, management and budgeting of Denver Water's financial resources, including acting as the disbursing authority for the Manager and custodian of the Department's documents and records. Major functional areas include accounting, treasury, long range financial planning, annual budgeting, water rate administration, purchasing and records and document management.

#### **Key 2003 Objectives (See also Performance Measures)**

- 1. Maintain financial stability and financial preparedness during the drought, including the development of drought surcharges, fees, and financial or management reports.
- 2. Work with all divisions to control expense levels, and prepare financially for the continuation of drought conditions.
- 3. Perform annual development and review of financial plan, rates, other fees and annual budget.
- 4. Investigate methods to improve electronic business functions.
- 5. Advise the Board, as trustee of the Department's retirement plan, on the plan's performance issues .

#### Regular & Introductory Employees (At End of Year)

	2000	2001	2002	2002	2003
Section	Actual	Actual	Budget	Actual	Budget
Director*	8.0	7.0	9.0	9.0	9.0
Treasury Operations	5.0	5.0	5.0	5.0	5.0
Fiscal Planning & Performance	4.0	4.0	5.0	4.0	5.0
Accounting	17.0	19.0	19.0	19.0	19.0
Rate Administration	2.0	2.0	2.0	2.0	2.0
Records & Document Admin**	12.0	12.0	8.0	8.0	8.0
Purchasing	8.0	7.0	8.0	8.0	8.0
Total	56.0	56.0	56.0	55.0	56.0

<sup>\*</sup> In 2002 Director of Finance increased by one employee with the addition of one PC support technician.

	2000	2001	2002	2002	2003
	Actual	Actual	Budget	Actual	Budget
Payroll	\$ 2,932	3,066	2,948	2,946	3,079
Employee Benefits	8,693	8,836	9,760	11,567	12,841
Materials	432	409	616	511	345
Services	655	1,081	747	586	780
Equipment	10	0	4	2	0
Refunds	160	614	102	77	102
Debt Service	34,026	31,449	32,543	35,194	33,405
Other	48	(952)	42	(50)	(127)
Total	\$ 46,956	44,503	46,762	50,833	50,425

<sup>\*\*</sup> Records & Document Administration decreased by five employees at the beginning of 2002 when four positions were transferred to Information Technology and one position was transferred to Director of Finance as Manager of RDA. Also, one IT manager position was transferred to IT from Manager of Finance.

#### **Engineering Division Summary**

#### **Activities**

The Engineering Division is responsible for the design, construction, survey and related engineering aspects of physical additions, improvements and maintenance for the raw and treated water system. Engineering disciplines and related functions include civil, structural, construction, administration, electrical, mechanical, hydraulic, and dam safety. Recreation and property management activities are also assigned to Engineering. These include easement acquisitions and licensing activities for properties. Distribution system functions are included within Engineering Division responsibilities.

#### **Key 2003 Objectives (See also Performance Measures)**

- 1. Complete the Marston Treatment Plant Filter Building One Construction within the milestones established on the modified contract. Continue excellent progress on the recycled water treatment pland and distributior system piping scheduled to be complete in early 2004. Successfully complete the new projects related to drought and fires that were added to 2003 work plan.
- 2. Continue the excellent results of recent years in completing the majority of projects on the work plan even with the necessary concentration on the above items.
- 3. Complete rectification of the distribution system facilities and finish the updating and correcting of these facility maps.

#### Regular & Introductory Employees (At End of Year)

	2000	2001	2002	2002	2003
Section	Actual	Actual	Budget	Actual	Budget
Director of Engineering	8.0	8.0	8.0	9.0	9.0
Programs and Projects	35.0	36.0	37.0	37.0	37.0
Survey	25.0	26.0	26.0	26.0	26.0
Distribution	38.0	39.0	40.0	39.0	40.0
Construction Management	21.0	22.0	23.0	23.0	23.0
Total	127.0	131.0	134.0	134.0	135.0
rotai	121.0	101.0	154.0	104.0	100.0

	2000	2001	2002	2002	2003
	Actual	Actual	Budget	Actual	Budget
Payroll	\$ 6,809	7,236	7,865	8,148	8,491
Materials	406	679	647	370	649
Services	5,586	10,203	4,813	6,704	4,845
Contract Payments	45,103	46,530	70,289	66,403	83,606
Equipment	57	63	10	101	57
Refunds	18	13	0	24	0
Other	0	0	0	0	0
Total	\$ 57,979	64,724	83,624	81,750	97,648

#### **Planning Division Summary**

#### **Activities**

The Planning Division is responsible for identifying and integrating the future water and facilities needs and resources of Denver Water and determining and protecting options to meet those needs and resources. Planning is also responsible for coordinating outside pertinent activities with local, state, and federal agencies. It accomplishes this by providing demographic projections and raw and treated water consumption forecasts. It also develops long and short-range plans for facility development. Additionally, it also determines the water supply available, plans and controls daily operation of the water supply, plans for the construction of treated water transmission distribution, pumping and storage facilities, performs environmental planning, and plays a key role in the development, protection, and management of water rights.

#### **Key 2003 Objectives (See also Performance Measures)**

- 1. Work with all Denver Water Divisions to address issues and problems occasioned by the drought, including forecasting the severity of the drought.
- 2. Continue Denver Water's cooperative role in metro water planning.
- 3. Plan for the treated water distribution system expansion.
- 4. Preserve Denver Water's ability to use its water resources by successfully addressing endangered species and other environmental concerns.
- 5. Preserve, protect, develop and utilize Denver's water resources to adequately serve our customers.

#### Regular & Introductory Employees (At End of Year)

	2000	2001	2002	2002	2003
Section	Actual	Actual	Budget	Actual	Budget
Director of Planning	3.0	3.0	3.0	3.0	4.0
Environmental Planning	4.4	4.4	4.6	4.6	4.6
Raw Water Supply	6.0	6.0	6.0	6.0	6.0
Water Rights	7.0	7.0	7.5	7.0	7.5
Water Resources Analysis	10.0	10.0	11.0	10.8	11.0
General Planning	5.0	4.0	5.0	4.0	5.0
Hydraulics	7.0	7.0	7.0	7.0	7.0
Total	42.4	41.4	44.1	42.4	45.1

		2000	2001	2002	2002	2003
		Actual	Actual	Budget	Actual	Budget
Payroll	\$ _	2,555	2,686	2,899	2,964	3,127
Materials		37	39	58	49	50
Services		1,584	1,483	2,164	1,590	2,241
Contract Payments		519	1,260	1,517	1,518	17
Equipment		29	6	4	6	6
Other		0	0	0	474	
Total	\$	4,724	5,474	6,642	6,601	5,441

#### **Operations and Maintenance Division Summary**

#### **Activities**

The Operations and Maintenance Division is responsible for operating and maintaining the physical plant of Denver Water. It establishes operating criteria for the proper operation of all plant facilities and maintains the Denver Water system to the satisfaction of outside regulating agencies. Major functions include: monitoring and developing water quality control methods, diversion and storage of raw water supply; maintenance and operation of physical plant at various dams, reservoirs, hydro-turbines and water treatment plants; construction, maintenance and repair of transmission and distribution piping, appurtenances, and facilities; operation of the distribution system and supervision of process control; and coordination of Denver Water Safety and Security, Environmental Compliance Programs and warehousing functions.

### **Key 2003 Objectives (See also Performance Measures)**

- 1. Manage system for drought reductions.
- 2. Increase efficiency.
- 3. Increase system reliability.
- 4. Increase security.
- 5. Improve reliability of Water Treatment Plants

#### Regular & Introductory Employees (At End of Year)

	2000	2001	2002	2002	2003
Section	Actual	Actual	Budget	Actual	Budget
Plant Office	5.0	5.0	5.0	5.0	5.0
Water Quality and Compliance	30.5	30.5	31.0	30.0	33.0
Safety & Loss Control	12.0	11.0	12.0	12.0	12.0
Source of Supply	60.0	61.0	62.0	60.0	62.0
Water Treatment	66.0	68.0	72.0	69.0	87.0
Treated Water Operations	59.0	59.0	60.0	58.0	61.0
Transmission & Distribution*	162.0	159.0	166.0	163.0	169.0
Instrumentation & Control	16.0	18.0	18.0	20.0	21.0
Maintenance and Warehouse	125.0	129.0	133.0	127.0	133.0
Total	535.5	540.5	559.0	544.0	583.0

<sup>\*</sup> Three Location section positions were transferred to Transmission & Distribution from Public Affairs in 2002.

		2000	2001	2002	2002	2003
		Actual	Actual	Budget	Actual	Budget
Payroll	\$ _	26,247	27,504	29,430	29,300	29,158
Materials		11,805	12,316	12,544	11,817	9,837
Services		11,263	13,148	9,346	14,466	8,885
Contract Payments		0	0	0	0	0
Equipment		2,391	2,965	2,681	2,642	1,217
Refunds		0	1	0	1	0
Other		(57)	(95)	0	4	0
Total	\$	51.649	55.839	54.001	58.230	49.097

#### **Divisional Reconciliation to Summary Totals**

The following table reconciles the Divisional Summary totals for each year to the total expenditures shown elsewhere in this document.

. , ,	,	2000	2004	2002	2002	2002
		2000	2001	2002	2002	2003
Division Name		Actual	Actual	Budget	Actual	Budget
Manager & Staff	\$	24,164	26,869	34,735	31,330	33,264
Public Affairs		10,267	15,464	22,349	22,276	25,650
Legal		2,578	2,234	2,323	1,591	1,787
Finance		46,956	44,503	46,762	50,833	50,425
Engineering		0	57,979	64,724	83,624	81,750
Planning		4,724	5,474	6,642	6,601	5,441
Operations & Maintenance.		51,649	55,839	54,001	58,230	49,097
Adjustments:						
Warehouse Purchases						
and Issues <sup>(1)</sup>		828	509	-899	-221	-37
Cash Flow <sup>(2)</sup>		-1,271	-1,108	0	-1,885	0
Historical Timing Adjustment		0	0	-11,956	0	-8,000
Additional Vacancy Savings						-1,174
Total Expenditures	\$	0	139,895	207,763	218,681	252,379

Adjustments related to the timing of purchases and issues of warehouse stock.

Denver Water maintains a warehousing operation that purchases materials and supplies into stock.

These items are then issued and charged to jobs as needed. The Warehouse Purchases and Issues Adjustment is required to insure that the total of materials as issued balances to the amount of purchases made for warehouse stock.

<sup>(2)</sup> The Cash Flow Adjustment is the difference between expenditures as booked and disbursed. Expenditures are budgeted and reported on a modified accrual basis (as booked). Total expenditures are then converted to a cash basis (disbursed) for purposes of determining year-end designated balances.

DENVER WATER KEY PERFORMANCE MEASURES	Current Denver Water Goal	ACTUAL 2001	ACTUAL 2000	ACTUAL 1999	ACTUAL 1998	Div Resp For Performance
I. Provide Customers with High Quality Water	Joan	2001	2000	1555	1550	T CITOTINATICE
E=External; I=Internal						
A. Unfavorable quality:						
E 1. Smell-taste-# of customer						
complaints per qtr	< 36	78	55	37	133	O&M
E 2. Clarity - # of customer						
complaints per quarter	< 36	75	19	47	70	O&M
E 3. Hardness-# of customer				1		
complaints per quarter	< 30	1	1	17	18	O&M
B. Meet or exceed key DW standards						
I 1a. Turbidity - Foothills	< .1 NTU	0.04	0.04	0.04	0.04	O&M
I 1b. Turbidity - Marston	< .1 NTU	0.04	0.06	0.08	0.05	O&M
I 1c. Turbidity - Moffat	< .1 NTU	0.05	0.06	0.06	0.05	O&M
I 2a. Fluoride - Foothills	.8 - 1.2mg/1	0.85	0.87	0.89	0.9	O&M
I 2b. Fluoride - Marston	.8 - 1.2mg/1	0.88	0.90	0.91	0.91	O&M
I 2c. Fluoride - Moffat	.8 - 1.2mg/1	0.80	0.89	0.85	0.85	O&M
I 3a. Chlorine Residual- Foothills	1.1 - 1.5mg/1	1.43	1.48	1.44	1.38	O&M
I 3b. Chlorine Residual- Marston	1.1 - 1.5mg/1	1.51	1.49	1.41	1.41	O&M
I 3c. Chlorine Residual- Moffat	1.1 - 1.5mg/1	1.56	1.58	1.41	1.32	O&M
I 4a. pH - Foothills	7.5 - 8.0	7.8	7.8	7.8	7.8	O&M
I 4b. pH - Marston	7.5 - 8.0	7.7	7.8	7.9	7.8	O&M
I 4c. pH - Moffat	7.5 - 8.0	7.8	7.8	7.8	7.8	O&M
C. Meet or exceed mandated Federal stds     1. Number of reportable violations	0	0	0	0	0	O&M
·						
II. Provide Customers With Excellent Service  A. Positive customer contact  E Per customer service rep contact:						
Length of time to answer phones	< 30 sec	59 Seconds	76 Seconds	49 Seconds	47 Seconds	PUB
E 2. Length of time for problem-query solution, requiring field ck.	< 48 hrs	42 Hours	42 Hours	42 Hours	36 Hours	PUB
E 3. Customer Satisfaction Survey Index Level (4.0 = Best) <sup>(1)</sup>	= or < 3.0	3.3	3.4	3.6	3.5	PUB
mean zerei (no zees)	Si volo	0.0	0.1	0.0	0.0	. 65
B. Reliable service     E    1. Outages-average DW response time	< 20 mins.	25 Minutes	24 Minutes	24 Minutes	23 Minutes	O&M
E 2. Disruptions-# of unplanned	20 111110.	20 1111111100	Z i wiiiiatoo	2 i iviii idtoo	20 Milliatoo	Cairi
disruptions(main breaks)	208 Average	261	243	195	166	O&M
E 3. Disruptions - Avg time of duration	< 4 hours	7.0 Hours	6.5 Hours	7.5 Hours	6.0 Hours	O&M
E 4. # days involuntary restrictions						
(any part of day=1 day)	0	0	0	0	0	PLN
E 5. # Pressure Complaints per month	< 30	19	23	17	23	PUB
C. Rates are appropriate for service     E    1. Rates compared to metro water     utilities						
a. Inside Rates (1 = lowest Rate)	Lowest 25% of survey	3 of 19	3 of 19	2 of 19	2 of 19	ALL DIVS
b. Outside Rates (1 = Lowest Rate)	Lowest 50% of survey	2 of 12	2 of 12	2 of 12	2 of 12	ALL DIVS
D. System reliability - efficiency						
I 1. # days DW met minimum stream	265 hr	265	265	265	265	DI N
flow required	365/yr.	365	365	365	365	PLN
I 2. # of days did not exceed flow thresholds NF of So Platte						
due to DW operations (excl. water			l			L
rights diligence opr) I 3. # of days DW did not violate min.	365/yr.	365	365	365	365	PLN
pool requirements			1			
@Chatfield Res.(excl. those caused	205/	205	205	205	205	l <sub>DLN</sub>
St.Eng.)	365/yr.	365	365	365	365	PLN
					•	•

		Current					
	DENVER WATER KEY PERFORMANCE MEASURES	Denver Water Goal	ACTUAL 2001	ACTUAL 2000	ACTUAL 1999	ACTUAL 1998	Div Resp For Performance
	ride Customers With Excellent Service (co				1000		
E.	Treatment Plant Utilization 1.Foothills(base load) % production to total water treated	65%	57.0%	64.6%	75.5%	76.2%	O&M & PLN
1	Marston(peak load) % production to total water treated	15%	19.1%	17.5%	11.5%	6.6%	O&M & PLN
1	3.Moffat(peak load) % production to total water treated	20%	23.9%	17.9%	13.0%	17.2%	O&M & PLN
F.	Transmission & Distribution Inside Denver & Total Service:  1. # main breaks per x miles of pipe	20 %	23.976	17.9%	13.0 %	17.276	OQIVI & FLIN
	pipe per year  2. Ratio peak day to avg day delivery	<1 break per 10 miles pipe/y	9.6	10.2	12.6	12.1	ENG,PLN,O&M
1	(10yr. Rolling Avg.) 3. % pipe replaced per year	2.5 rolling average 1.0%	2.33 0.32%	2.09 0.61%	2.31 0.68%	2.41 0.70%	PLN ENG,PLN,O&M
G.	System Wide:  1. Unaccounted for water % of total total water delivered	5.0% (National Avg=0%)	4.36%	2.87%	5.34%	6.64%	ENG,PLN,O&M
III. Exe A.	rcise responsible stewardship of assets Facilities maintained properly 1. Emergency Hrs. as % Preventative						
	Maint Hours <sup>(2)</sup> 2.% O&M Div Overtime Hrs. to Total	8%	10.50%	11%	13%	4%	O&M
E	O&M Div. Hrs. 3. % of fire hydrants in service	< 3% 99.90%	6.1% 99.5%	5.5% 99.2%	5.7% 99.2%	5.3% 99.7%	O&M O&M
B. E/I	Workforce reflects community served  1. Are we in compliance with						
E/I	Affirmative Action Plan?  2. % of DWD job groups in which we are under represented	Yes	No	No	No	No	ALL DIVS.
	Minorities Women	None None	25% 73%	25% 73%	25% 73%	23% 69%	MGR(AA&HR) MGR(AA&HR)
C. E/I	Conservation  1. Reduce avg. annual demand from 877 (1978 base year)GAD to 744 GAD by 1999 using 9-yr centered avg (GAD=Gal per Acct per day)						
E/I	per Foothills Stipulation Goals  2. Avg. Conservation Dollars spent to Acre	<744 GAD by 1999	752	795.6	739.8	771.9	PLN & PUB
	feet saved 3. % of single-family residential	< \$5,000 per acre foot saved	(00-01)\$1553	('99-00)\$1494	('97-98)\$1584	('97-98)\$1584	PUB
	customers with Xeriscape 4. Contact and evaluate the 100	Average of 33% by 2002	30%	29%	28%	26%	PUB
	highest water users by 2002 5. # accts using less than 18 gals. Per	100% by 2002	In Progress	Begin 2002	Begin 2002	Begin 2002	PUB
	sq. ft. per yr, adj for rainfall	Set when available	Not available	Not available	Not available	Not available	PUB
D.	Retail Population served per employee	678	774	723	704	687	ALL DIVS
	2.Retail Population served per core employee(O&M div)	1,307 Average	1,494	1,390	1,379	1,357	O&M
	3.% Supervisors & Managers Attending 1+Training Classes	100%	73%	74%	68%	72%	ALL DIVS
	% Non-Supv, Non-Mgr Attending 1or more Training Classes	75%	65.20%	61.00%	63.00%	78.30%	ALL DIVS
	<ul><li>5. % of supervisory employees to non- supv employees</li><li>6. # lost time days due to injury per</li></ul>	1 to 10 FTE's	1:4.81	1:4.73	1:4.5	1:4.8	ALL DIVS
' 	per year 7. At fault vehicle accidents/million	not >75 days	136	165	127	126	ALL DIVS
	miles driven	not >12	21	27	18	15	ALL DIVS

	DENVER WATER KEY PERFORMANCE MEASURES	Current Denver Water Goal	ACTUAL 2001	ACTUAL 2000	ACTUAL 1999	ACTUAL 1998	Div Resp For Performance
III. Exe	cise responsible stewardship of assets (c						
1	<ol><li>Gross Turnover Rate, incl. Retirements</li></ol>	5-8%	7.3%	7.2%	7.3%	7.2%	ALL DIVS
E. I I I I I I I I I I I I I I I I I I I	Operations are efficient  1. O&M Costs(incl.S.O.S) per (000)/Gal treated Water delivered  2. O&M Costs(exclS.O.S) per (000)/Gal treated Water delivered  3. Total operating expenses per connection  4. Salaries as % operating revenue  5. Water Qual Cost per (000)/gal treated water delivered  6. Water Quality tests performed  7. % of water quality tests performed to of % tests required  8. Average annual regular pay per employee  9. Comparable Benefits Per Annual	\$0.86 Average \$0.79 Average \$236.58 Average 40% Average \$0.02 current year 50,393.40 Average 100% DW step 5 approx. equal to 50th percentile in Survey	\$1.07 \$0.97 \$313.32 37.0% \$0.020 34,035 100% \$48,929	\$0.98 \$0.90 \$303.81 35.0% \$0.016 41,846 100% \$47,574	\$1.04 \$0.98 \$293.62 41.0% \$0.018 57,661 100% \$47,360	\$0.89 \$0.84 \$287.44 40.0% \$0.016 53,521 100% \$46,166	ALL DIVS ALL DIVS ALL DIVS ALL DIVS O&M O&M ALL DIVS
	Survey	Approx.= to Survey Avg	40.450/	40.000/	40.000/	47.450/	ALL DIVS
	<ul><li>a. Denver Water</li><li>b. Survey - Utilities, nationwide</li></ul>		48.15% 45.62%	48.23% 45.93%	49.32% 43.60%	47.15% 47.10%	ALL DIVS ALL DIVS
F. E/I I	Financial Stewardship  1. Optimal use of financial assets:  a) Credit rating (3) b) Operating ratio: 1) 3 Year Moving Average 2) Annual c) Total Asset turnover: 1) 3 Year Moving Average 2) Annual	AA = or < .60% = or >.9%	AA+ 55.6% 55.8% 11.1% 11.2%	AA+ 56.2% 52.2% 11.0% 11.1%	AA+ 58.5% 59.6% 11.0% 10.8%	AA 58.0% 57.8% 11.0% 11.2%	FIN FIN FIN
ı	d) Cost of Debt & Interest Coverage						
	Weighted Avg Cost of Debt     Interest Coverage	> or = 2.5x	5.08% 5.0	5.37% 4.4	5.36% 4.1	5.38% 3.9	FIN FIN
IV. Exe	rcise creative stewardship of assets						
A.	Work force is creative						
- 1	1.% regular employees submitting						
	suggestions per year	10%	3%	3%	3%	3%	ALL DIVS
- 1	2. % suggestions awarded for possible						
	cost savings	15%	3%	3%	4%	4%	ALL DIVS

Denver Water's performance measures are taken from its Mission Statement. Each of the four goals expressed in the Mission Statement was identified (shown in bold witrh roman numerals). Key measures were then developed from the perspective of external (customers, media, other than Dwenver Water) and internal (Denver Water managers, supervisrs, employees) to measure how well the goals were being met.

#### FOOTNOTES:

<sup>(1)</sup>Comprised of referral calls to supervisor, average hold time, mail surveys, and payment goals met

higher due to break in Cond. 94

DIVISION RESPONSIBLE:

ENG = Enginewering Divison

FIN = Finance Division

LGL = Legal Division

MGR(HR) = H\uman Resources Section

MGR = Manager and Staff Division

O&M = Operations and Maintenance Division

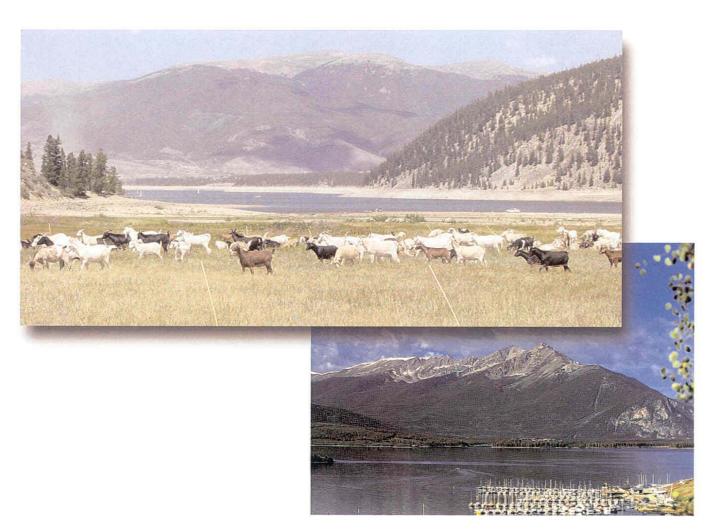
PLN = Planning Division

PUB = Public Affairs Division

ALL DIVS = All Divisions

<sup>(2)1999</sup> higher due to break in Cond. 55;1997

<sup>(3)</sup> Follows City's Credit Rating



Denver Water's Dillon Reservoir reflects the effects of the ongoing drought. A herd of goats grazes in an open field, with a depleted Dillon Reservoir in the background. In contrast, the reservoir stands nearly full in photo taken near the Dillon Marina during a "normal" summer season.

Systemwide, reservoirs were at an average 66 percent of capacity in July 2002. With a continuation of the drought in 2003, reservoirs are predicted to be between 35- and 40-percent of capacity in July.

# Section 6 - Debt Service and Obligations Under Capital Leases Debt Policy

The Board's guidelines for the use of debt were adopted on December 19, 1995. In the guidelines, the Board reaffirmed its long-standing policy of using debt

financing for system expansion and improvements and prohibiting its use for payment of operating and maintenance expenses. The Board also reaffirmed its long-standing current refunding program. The refunding program has enabled Denver Water to obtain a lower average cost of debt by making it possible to borrow at a shorter average maturity. Also, because Denver Water's facilities generally remain useful beyond the original maturity of debt issued to construct the facility, the refunding program has enabled Denver Water to better match loans used to construct facilities to the lives of the facilities.

Closer matching means that the cost of each facility is shared by all customers who will use the facility both present and future water customers. In addition, because one effect of the refunding program is to increase the funds available for current year capital requirements, the refunding program has also had the effect of reducing current year revenue requirements for capital projects. This has helped Denver Water avoid erratic fluctuations in rates and fees.

Denver Water uses the following criteria to evaluate the appropriateness of increasing debt and to evaluate both the adequacy of rate proposals and the structure of proposed borrowings. The criteria is not imposed as part of a Board covenant but was developed by Denver Water for internal evaluations. For the purposes of computing the various ratios, obligations under capital leases are treated as debt.

- A. The Debt Ratio should not exceed 40%.
- B. Current Debt Service Coverage excluding System Development Charges should be equal to or greater than 1.1x.
- C. Projected Debt Service Coverage with System Development Charges included in revenue at the historic minimum annual amount of \$6.0 million should be equal to or greater than 1.5x.
- D. Projected Interest Coverage excluding System Development Charges should be equal to or greater than 2.5x.
- E. The year-end balance in the Water Works Fund, net of Principal and Interest
- F. requirements for the next 12 months should be equal to or greater than \$5 million.

Calculations showing the historical and projected level of performance against the guidelines are shown on page 91.

#### Debt

As amended by voters at the November 5, 2002 election, section 10.1.15 of the Charter of the City and County of Denver authorizes the Board of Water Commissioners to issue only revenue bonds. Prior to November 2002, the Board was also authorized to issue General Obligation ("GO") Bonds and Revenue Bonds. GO Bonds issued prior to November 2002 which remain outstanding are backed by the Board's irrevocable commitment to pay principal and interest from the revenues of the water department. The Board currently has no existing revenue bond debt.

The Board currently has in effect a program of refunding a portion of the debt that matures each year. Additional amounts may also be refunded when regulations permit and market conditions are favorable. Water bonds are excluded from the debt limitations of the City and County of Denver.

At the end of 2002, the Board had outstanding General Obligation Debt of \$205.5 million. A schedule of General Obligation debt service appears below. No revenue bonds have yet been issued by the Board. Scheduled annual debt service for 2003 is \$22.1 million and for 2004 is \$23.8 million. The refunding program is expected to both reduce actual cash outlays from the scheduled amount and to smooth the volatility of future cash expenditures for debt service.

# Schedule 1: Outstanding Debt As of December 31, 2002

## **General Obligation Water Bonds**

<u>Series</u>	True Interest Cost of Sale	Final <u>Maturity</u>	Original <u>Amount</u>	<u>Outstanding</u>
1993, Sept.	5.17%	2009	15,600,000	\$ 1,380,000
1994	5.09%	2010	131,835,000	42,285,000
1995	5.08%	2010	12,825,000	9,560,000
1996	5.24%	2011	16,975,000	11,965,000
1997	4.93%	2012	19,530,000	18,530,000
1999	5.67%	2029	14,530,000	14,530,000
2000	5.06%	2015	12,700,000	12,700,000
2001A	4.38%	2016	11,215,000	10,415,000
2001B	3.84%	2009	75,170,000	73,480,000
2002	3.99%	2022	11,610,000	10,635,000

Schedule 2: Budgeted Debt Service (Thousands of Dollars) As of December 31, 2002											
General Obligation Bonds											
	<u>Principal</u> <u>Interest</u> <u>Total</u>										
2003	\$	11,960	\$	10,136	\$	22,096					
2004		14,275		9,570		23,846					
2005		23,670		8,897		32,567					
2006		20,705		7,716		28,421					
2007		25,505		6,675		32,180					
2008-2012		79,865		17,214		97,079					
2013-2017		15,060		5,486		20,546					
2018-2022		2,890		3,657		6,547					
2023-2027		0		3,234		3,234					
2028-2029		<u>11,550</u>		<u>1,294</u>		<u>12,844</u>					
Total	\$	205,480	\$	73,880	\$	279,360					

#### **Capital Leases**

The Board also uses capital leases to finance facilities and equipment. A portion of the Board's capital leases have been securitized using a Certificate of Participation (COP) structure. A COP represents the right to receive a defined amount of rental revenue from a specified lease arrangement. Legally, each year the Board decides whether to allocate funds for the lease payments. The annual nature of the lease obligation means that credit rating agencies and certificate holders must evaluate both the importance of the leased facility to the Board's operations and the credit history of the Board. For this reason, the Board used the COP structure only to finance property and equipment that is essential to Board operations. The projects that were financed through outstanding COPs are located at the Marston and Moffat Treatment Plant sites.

A capital lease agreement was also used to finance the future acquisition of 40% of the storage capacity and water rights at Wolford Mountain Reservoir. That lease, which began in 1987, extends until 2020.

On December 31, 2002, the Board's obligations under capital leases totaled \$94.1 million. Required payments under capital leases are \$10.3 million for 2003 and \$10.3 million for 2004.

Schedule 3: Capital Lease Obligations As of December 31, 2002										
<u>Certificates</u> <u>Of Participation</u>	True Interest Cost at Sale	Final Maturity	Original <u>Amount</u>	Unpaid <u>Balance</u>						
1998 2001	4.31% 4.32%	2011 2016	34,885,000 40,580,000	\$ 25,280,000 <u>38,310,000</u>						
Sub-Total Certificated	d			\$ <u>63,590,000</u>						
Other Capital Leases										
Wolford Mountain Lease	6.75%	2020	43,072,924	\$ <u>30,536,139</u>						
Total Capital Leases				\$ <u>94,126,139</u>						

# Schedule 4: Budgeted Obligations under Capital Lease (Thousands of Dollars) As of December 31, 2002

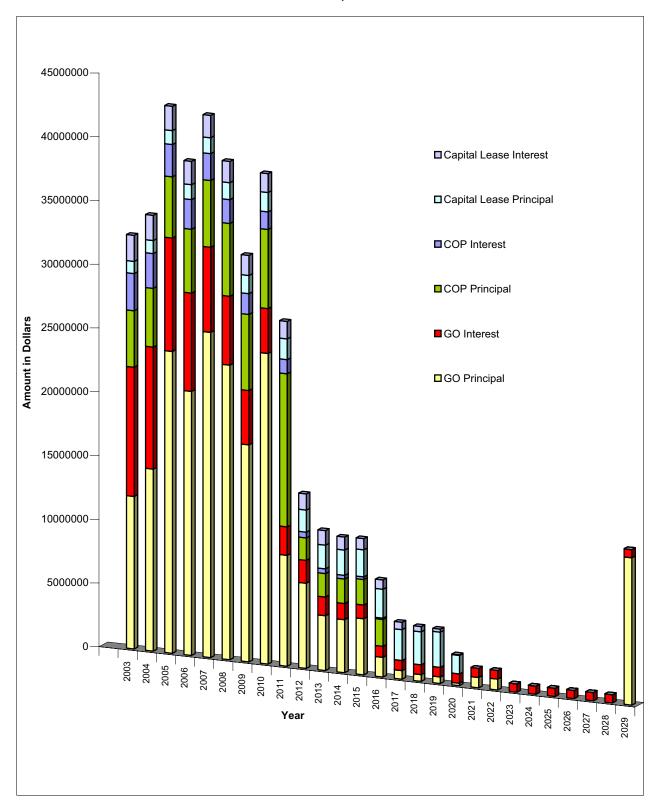
Certificates of Participation	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2003 2004 2005 2006 2007 2008-2012 2013-2017 Total	\$ 4,430 4,605 4,800 5,005 5,235 31,650 <u>7,865</u> 63,590	\$ 2,916 2,729 2,534 2,327 2,110 6,432 <u>977</u> 20,025	7,346 7,334 7,332 7,345 38,082 <u>8,842</u> 83,615
Other Capital Leases			
·	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2003 2004 2005 2006 2007 2008-2012 2013-2017 2018-2022 Total	\$ 955 1,020 1,090 1,165 1,245 7,630 10,634 <u>6,797</u> 30,536	\$ 2,045 1,980 1,910 1,835 1,755 7,370 4,366 703 21,964	\$ 3,000 3,000 3,000 3,000 15,000 15,000 <u>7,500</u> 52,500

## Calculation of Ratios\* Denver Water Debt Guidelines (Thousands of Dollars)

(1110u	Salius Oi Do	iiai 3)		(1)	(0000
Debt Ratio	<u>1999</u>	<u>2000</u>	<u>2001</u>	2002 <sup>(1)</sup> Estimate	ʻ2003 <u>Budget</u>
Total GO Debt & Capital Leases Divided by: Sum of Net Fixed Assets Plus	296,941	291,165	305,126	298,065	320,131
Net Working Capital  Debt Ratio  Target: <=40%	1,213,067 24.5%	1,275,534 22.8%	1,338,825 22.8%	1,392,418 21.4%	1,487,677 21.4%
Current Debt Service Coverage					
Net Revenues Divided by: Scheduled Principal and	62,575	69,730	78,391	59,819	63,842
Interest payments-current yr	36,708	34,778	31,208	32,523	32,443
DSC ex. SDC Target: >=1.1x	1.7	2.0	2.5	1.8	1.9
Projected Net Debt Service Coverage, with	System De	velopment C	<u>Charges</u>		
Net Revenues	62,575	69,730	78,391	59,819	63,842
Plus: SDC @ \$6 million historic minimum	6,000	6,000	6,000	6,000	6,000
Revenues and SDCs		75,730	84,391	65,819	
Revenues and SDCs	68,575	75,750	04,391	05,619	69,842
Divided by: Principal and Interest Requirements					
next 12 months	33,527	31,559	32,543	32,442	34,179
Less: Current yr refunding proceeds, gross	14,530	12,700	11,215	11,610	9,000
Net Debt Service	18,997	18,859	21,328	20,832	25,179
Net DSC w/SDC	3.6	4.0	4.0	3.2	2.8
Target: >=1.5 x					
Projected Interest Coverage					
Net Revenues	62,575	69,730	78,391	59,819	63,842
Divided by: Interest Requirements	02,373	09,730	70,551	33,013	03,042
next 12 months	15,125	15,718	15,780	15,097	14,279
Interest Coverage	4.1	4.4	5.0	4.0	4.5
Target: >=2.5 x	7.1	7.7	0.0	4.0	4.0
Designated Balances for System Operation	ns, Capital a	and Land Sal	le Account		
Net of Projected Debt Service					
Year-end Balance	152,862	151,863	193,105	161,537	137,346
Less: Principal and Interest Requirements	,	•	•	,	•
next 12 months	33,527	<u>31,559</u>	<u>32,543</u>	32,442	<u>34,179</u>
Net Balance	119,335	120,304	160,562	129,095	103,167
Target: >=5,000	,	,	,	,	, -

<sup>\*</sup>For the purpose of ratio computations, obligations under capital lease are treated as debt.

Denver Water
Scheduled Debt Service and Obligations Under Capital Leases
as of December 31, 2002





A full Antero Reservoir, shown in a 1999 photo, illustrates a sharp contrast to the Hayman fire, which nearly circled Denver Water's Cheesman Reservoir. The fire burned 137,760 acres and destroyed 132 homes. Costs of suppression totaled more than \$39 million.

## **Section 7 - Designated Balance**

## **Designated Balance Summary**

2003 began with an actual Designated Balance of \$156,540,000. The budget projects this amount to be increased during 2003 by receipts of \$234,907,000 and decreased by expenditures of \$254,101,000, resulting in a total 2003 Ending Balance of \$137,346,000.

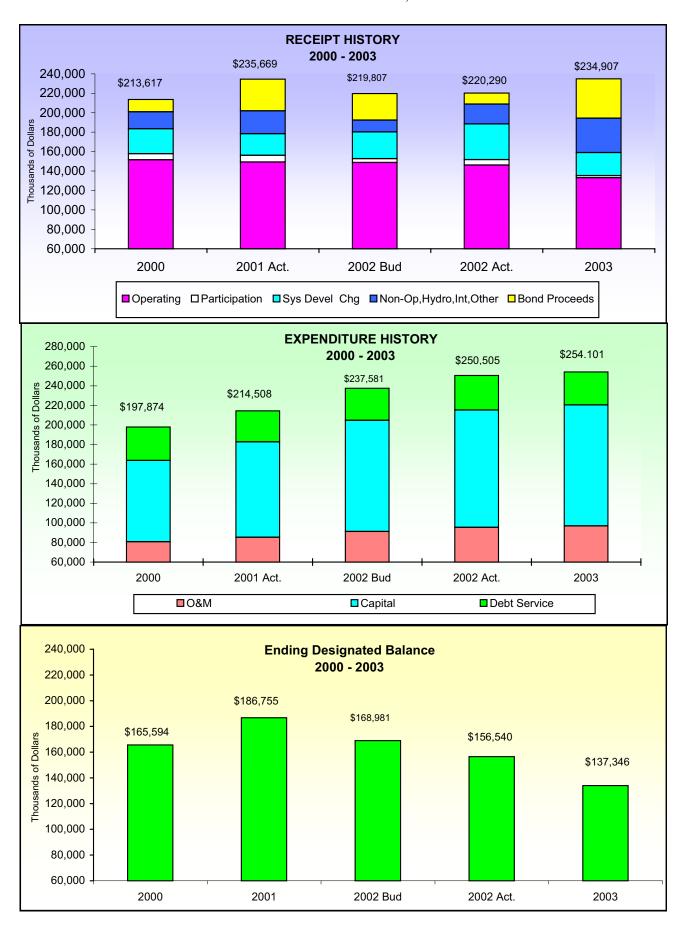
- 1. The Designated Balance for system operations and capital for each year reflect the following factors: Three months of the next year's operation and maintenance.
- 2. 50% of the next year's non-expansion capital (normal replacements and improvements).
- 3. One year of debt service.
- 4. Self-Insurance continuing at 5% of the next year's operating receipts.
- 5. Future Capital consisting of the difference between the total designated balance and the total of amounts for operation and maintenance, non-expansion capital, debt service and self-insurance contingencies.
- 6. Temporary drought and tap surcharges to encourage water conservation during drought conditions.
- 7. Grants to help mitigate the costs of repairing the area around Cheesman Reservoir affected by the 2002 Hayman fire.

#### Designated Balance 2000 - 2003 (Thousands of dollars)

Operation & Maintenance (3 months, next year)	\$	2000 Actual 23,781	\$	<b>2001 Actual</b> 26,541	\$	<b>2002 Budget</b> 22,705	\$	2002 Actual 27,007	\$	<b>2003 Budget</b> 29,145
Non-expansion Capital (50% of normal replacements and improvements, next year)		8,921		13,831		13,860		10,607		13,553
Debt Service Principal, Interest and Related (1 Year, next year)		31,780		35,258		39,761		33,630		41,773
Self Insurance (5% of Operating Receipts, next year)		7,459		7,311		7,468		6,653		6,958
Future Capital: Supply Water Treatment Transmission & Distribution Other		57,123 29,001 1,758 5,771		41,495 47,423 9,880 5,016		51,909 28,838 1,648 2,792		44,904 29,188 748 1,159		16,977 2,899 828 7,249
Drought : Drought Surcharge Tap Surcharge		0		0 0		0 0		776 1,333		11,043 4,538
Hayman Fire Repair Grants: NCRS Grant from USDA (70% of est \$3.5 million of costs after Sept 16, 2002.		0		0		0		535		1,883
EPA Section 319 Grant (60% match of est \$833,333 cost for revegetation	-	0	-	0	-	0	_	0	_	500
Total Designated Balance	\$_	165,594	\$	186,755	\$	168,981	\$_	156,540	\$_	137,346

## Comparison of Receipts and Expenditures 2000 - 2003 (Thousands of Dollars)

	-	2000 Actual	_	2001 Actual	-	2002 Budget	_	2002 Actual	_	2003 Budget
Beginning Designated Balance Receipts:	\$	149,851	\$	165,594	\$	186,755	\$	186,755	\$	156,540
Operating	\$	151,490	\$	149,188	\$	148,785	\$	146,210	\$	133,065
Drought Surcharge		0		0		0		776		11,043
Non-Operating		3,315		3,102		2,947		3,169		2,811
Hydropower		2,108		1,904		2,160		1,456		988
System Development Charges		25,620		22,259		27,446		36,644		23,783
Tap Surcharge		0		0		0		1,333		4,538
Participation		6,392		7,034		3,918		5,573		2,115
Reimbursements & Grants		791		6,802		152		1,881		3,123
Interest on Investments		8,761		9,522		4,804		8,459		4,486
Other		2,463		3,200		2,200		3,396		8,455
Subtotal Receipts	\$	200,940	\$	203,011	\$	192,412	\$	208,897	\$	194,407
Bond Proceeds	-	12,677	_	32,658	-	27,395	_	11,393	_	40,500
Total Receipts	\$	213,617	\$_	235,669	\$_	219,807	\$_	220,290	\$_	234,907
Expenditures:										
Operation & Maintenance Programs:	:									
Raw Water	\$	11,949	\$	13,576	\$	13,781	\$	17,550	\$	14,080
Recycled Water		7		0		541		300		1,746
Water Treatment		17,198		17,894		18,494		18,083		18,170
Delivery		40,291		41,355		46,292		44,462		50,454
General Plant		11,391		12,550		12,189		15,058		12,556
Total Operation &	-		_		-		_		-	
Maintenance Expenditures	\$	80,836	\$_	85,375	\$	91,297	\$_	95,453	\$_	97,006
Capital Programs:										
Raw Water	\$	31,173	\$	10,721	\$	21,484	\$	15,341	\$	18,371
Recycled Water		1,987		15,908		28,796		31,467		54,898
Water Treatment		16,078		29,527		26,157		27,330		14,682
Delivery		25,860		29,735		31,728		30,724		32,177
General Plant		7,899		11,462		17,363		14,932		11,337
Historical Timing Adjustment		0		0				0		(8,000)
Total Capital Expenditures	\$	82,997	\$	97,353	\$	(11,956) 113,572	\$	119,794	\$	123,465
Debt Service and Related	\$	34,041	\$_	31,780	\$_	32,712	\$_	35,258	\$_	33,630
Total Expenditures	\$	197,874	\$	214,508	\$	237,581	\$	250,505	\$	254,101
Ending Designated Balance	\$	165,594	\$	186,755	\$	168,981	\$_	156,540	\$	137,346





The Rocky Mountain West's arid climate, coupled with an ongoing drought, makes a convincing argument for the use of alternatives to traditional, and thirsty, landscaping that features vast areas of turf.

Tim LaPan, Denver Water conservation specialist and landscape architect, foreground, stands atop a plot of artificial grass, located near the loading dock area on the northeast side of Denver Water's administration building. He examines a handful of man-made "fertilizer," composed of tiny rubber beads made from ground-up tires, which are spread on the artificial turf to make it "stand up" like the real grass. However, unlike the "real thing," the artificial turf and its "fertilizer" require no water and may be a practical alternative for real grass in places such as traffic medians and other high-impact areas. With LaPan is Dale Collett, representative for the artificial turf product.

Xeriscaping, a landscape design strategy that incorporates vegetation that thrives in dry climates and requires minimal watering, offers a practical -- and attractive -- alternative to more traditional, and water-consumptive, landscape architecture. Pictured are, in foreground, Day Lilies (bemerocallis sp), and Blanket Flower (gaillardia aristata).

## **Section 8 - Glossary of Terms**

## Acronyms

AF

Acre Foot

**AMWA** 

Association of Metropolitan Water Agencies

**AWWA** 

American Water Works Association

COP

Certificate of Participation

**CWA** 

Clean Water Act

DIA

**Denver International Airport** 

DW

**Denver Water** 

**EPA** 

**Environmental Protection Agency** 

**GAD** 

Gallons per Account per Day

**GIS** 

Geographic Information System

G. O. Bonds

**General Obligation Bonds** 

**MBE** 

Minority Business Enterprise

**IRP** 

Integrated Resource Planning

MGD

Millions of Gallons per Day

**NRCS** 

Natural Resources Conservation Services

**NWRS** 

National Water Resource Association

**RCRA** 

Resource Conservation and Recovery Act

**WBE** 

Women's Business Enterprise

**WUWC** 

Western Urban Water Coalition

#### **Definitions**

#### **Annual Yield**

Maximum basic demand the water supply could meet throughout a period of historical or synthesized hydrological conditions.

#### **Bonds**

Debt instruments issued by a state or local government. According to the Charter, the Board may issue revenue bonds which are secured solely by it's revenue. In the past it was able to issue general obligation bonds that were secured by the full faith and credit of the City of Denver.

#### **Booked**

Accrual method of accounting in which expenses are recognized when the liability is incurred.

#### **Budget**

A financial plan for a specified period of time (fiscal year) that assigns resources to each activity in sufficient amounts so as to reasonably expect accomplishment of the objectives in the most cost effective manner.

## **Capital Work Plan**

A category of Master Plan items that are considered to be of a capital nature. Includes projects having a depreciation life of over one year and tends to benefit future periods, or has the effect of increasing the capacity, efficiency span of life or economy of an existing fixed asset. Example: the construction of a new conduit.

## **Capital Leases**

A lease having essentially the same economic consequences as if the lessee had secured a loan and purchased the leased asset.

#### **Casual Employee**

An employee who works on an intermittent basis as a summer employee or during other brief periods.

#### **Certificates of Participation**

Evidence of assignment of proportionate interests in rights to receive certain revenues pursuant to a Master Lease Purchase Agreement between the Board of Water Commissioners, as lessee, and Denver Capital Leasing Corporation, as lessor.

#### **Chart of Accounts**

Listing of account numbers and their descriptions.

#### **Contract Payments**

Consists of contract payments for construction, materials purchased for contractor installation, acquisition of land and land rights and water rights.

## **Corporate Culture**

Values that set a pattern for a company's activities, opinions and actions.

#### **Cost Control Center**

A term used to denote a responsibility center. It is an organizational unit that has been placed in charge of accomplishing certain specified tasks. Example: Water Control Section.

## **Customer Taps**

A physical connection to a distribution main that, together with appropriate license affects water service to a licensed premise.

## **Debt Policy**

An on-going policy of what sources to use to invest in new infrastructure in order to assure enough water for good service in the future.

#### **Debt Service**

Consists of principal and interest on long-term debt.

#### **Demand Side Management**

Term used when rebates are given when a facility can reduce power consumption.

#### **Designated Balance**

The beginning and ending balance of the Water Works Fund are classified or designated into two categories for presentation purposes; the portion related to the Land Sales Account and the remainder that is available for System Operations and Capital purposes.

#### **Direct Materials**

Includes materials and supplies purchased for direct use and fuel and oil for vehicles and equipment (non-stores issues only).

#### **Disbursements**

Money paid out for expenses, liabilities or assets.

#### **Discretionary Employee**

The charter of the City and County of Denver allows the Board to establish a classification of employees who have "executive discretion," who shall number no more than 2% of all persons employed, and shall serve solely at the pleasure of the Board.

#### **Diversity Training**

Objective of providing skills for managing and working with people of all races, genders and cultures.

#### **Division**

Largest organizational unit reporting to the Manager.

#### **Employee Benefits**

Employee Benefits are expenditures paid by Denver Water for Worker's Compensation, Social Security, Retirement, Employee Assistance Program, Health and other insurances. It does not include employee withholdings or unemployment insurance.

#### **Endangered Species Act**

The federal law that sets forth how the United States will protect and recover animal and plant species whose populations are in dangerous decline or close to extinction. The law protects not only threatened and endangered species but also the habitat upon which species depend.

#### **Enterprise Fund**

A type of propriety fund or a governmental unit that carries on activities in a manner similar to a private business.

#### **EPA Section 319**

Environmental Protection Agency Program to provide funds to agencies to assist in clean water protection.

#### **Executive Discretion**

The responsibility, under the direction of the Manager, to implement Board Personnel Policies and programs and to comply with their meaning and spirit.

#### **Federal Statutes**

Statutes enacted by Congress relating to matters within authority delegated to federal government by the U.S. Constitution.

#### **Fund**

An accounting entity with a set of self-balancing accounts that is used to account for financial transactions for specific activities of government functions.

## **General Equipment**

Includes expenditures for the purchase of the following: computer equipment, office furniture and equipment, transportation equipment, storehouse equipment, construction and maintenance tools and equipment, chemical laboratory equipment, power operated equipment, communication equipment, garage and shops equipment and miscellaneous equipment.

#### **General Obligation Bonds (GO Bonds)**

Borrowing to provide for the acquisitions and construction of major capital facilities. Direct obligations for which full faith and credit is pledged.

#### Goals

Overall end toward which effort is directed.

#### Governmental Accounting Standards Board (GASB)

Establishes the generally accepted accounting principles for state and local governmental units.

#### **Historical Timing Adjustment**

Estimate of budget variances primarily due to changes in capital construction schedules and the timing of obtaining permits and acquiring rights-of-way.

## **Hydropower**

Hydroelectric power of/or relating to production of electricity by water power.

#### **Income Statement**

A financial statement showing revenues earned, the expenses incurred in earning the revenues and the resulting net income or net loss.

#### Infill

Undeveloped areas within the combined service area that Denver Water would be expected to serve in the future.

## **Integrated Resource Planning (IRP)**

A method for looking ahead using environmental, engineering, social, financial and economic considerations; includes using the same criteria to evaluate both supply and demand options while involving customers and other stakeholders in the process.

## **Introductory Employee**

An employee who is newly appointed to a position and is serving an introductory period, generally of six month's duration.

#### **Land Sales Account**

Proceeds from land sales, less Board specified water system expenditures plus interest earned on the balance of the account.

#### **Lease Payments**

Period payments of principal and interest pertaining to a lease.

#### **Long-Term Debt**

Debt with a maturity of more than one year from date reported.

#### **Master Plan**

Expenditures identified by projects and activities that are necessary to accomplish the Department's overall operating goals and objectives. The Master Plan, or Program Budget, is divided into a Capital Work Plan and an O&M Work Plan.

#### **Master Plan Item**

A specific activity or project that is identified in the Master Plan.

#### **Modified Accrual Basis**

Accounting method in which expenditures are reported and budgeted "as booked." The difference between expenditures "as booked" and disbursed is adjusted to determine the ending cash and investment balance amounts.

#### **Municipal Water Utilities**

Public entities whose responsibility is to deliver water to the customers.

#### **Non-Operating Revenue**

Revenue received from payments for services such as main inspections, installation of taps, calculating and mailing of sewer bills and other such services.

#### Non-Potable

Water not suitable for drinking. (See also Potable, Reuse.)

#### **Objectives**

Something toward which effort is directed - an aim, goal or end of action.

## **Operating Reserves and Restricted Funds**

The amount of cash and invested funds available at any point in time. The balance is the Water Works Fund as defined in this glossary.

#### **Operating Revenue**

Revenue obtained from the sale of water.

## Operation and Maintenance (O&M) Work Plan

A category of Master Plan items not capital in nature, that are normally ongoing activities and pertain to the general operations of Denver Water.

#### Other

Consists of such items as payroll deductions, sales tax, insurance claims, cash over and short, and budget adjustments.

#### **Other Services**

Consists of such items as training, employee expenses, rents and leases, ditch assessments, convention and conference expenses, subscriptions, maintenance and repair agreements and memberships.

#### **Overtime Pay**

Includes all overtime related payroll such as straight overtime, time and one-half overtime, all overtime travel compensation, swing and graveyard shift overtime differentials.

#### **Participation Agreement**

An agreement in which a distributor or developer pays for the cost of the distribution facilities such as conduits, treated water reservoirs or pump stations required to provide service within that district from the nearest existing available source.

#### **Potable**

Water that does not contain pollution, contamination, objectionable minerals or infective agents and is considered safe for domestic consumption; drinkable. (See also Nonpotable, Reuse.)

#### **Professional Services**

Consists of consultant payments for such activities as facility design, legal work and auditors.

#### **Program**

An organized group of activities and the resources to carry them out, aimed at achieving related goals.

#### **Program Budget**

A method of budgeting in which the focus is on the project and activities that are required to accomplish Denver Water's mission, goals and objectives. It provides for consideration of alternative means to accomplish these criteria. It also provides a control device for higher level management and cuts across organizational lines. Resources are allocated along program lines and across organizational lines.

## **Program Element**

Series of smaller categories of activities contained in the program such as raw water, water treatment, etc.

#### **Project Employee**

A contract worker assigned to a project of more than one year's duration and receiving a limited benefits package.

## Recycle

To use again; recycle; to intercept, either directly or by exchange, water that would otherwise return to the stream system, for subsequent beneficial use. (See also Potable, Nonpotable.)

#### Refunds

Includes System Development Charge Refunds and Customer Refunds.

#### **Regular Employee**

An employee who has satisfactorily completed an introductory period and has been approved by the Board to receive the rights and privileges of a tenured employee.

## **Regular Pay**

Includes all straight-time salaries and wages earned, leaves, tuition refunds, suggestion awards, swing and graveyard shift payrolls, and safety equipment allowances. Regular pay consists of all payroll items except for overtime pay.

#### Safe Drinking Water Act (SDWA)

Federal legislation passed in 1974 that regulates the treatment of water for human consumption and requires testing for and elimination of contaminants that might be present in the water.

#### Stores Issues

Includes materials and supplies issued from inventory and fuel and oil for vehicles and equipment (stores issues only).

#### Strategic Plan

Process that is a practical method used by organizations identifying goals and resources that are important to the long-term well being of its future.

#### Streamline Pay

Automatic deduction of bills from customers' checking accounts.

#### **System Development Charges**

A one-time connection charge that provides a means for financing a portion of the source of supply, raw water transmission facilities, treatment plants and backbone treated water transmission facilities required to provide service to a new customer. Sometimes called a tap fee.

## **Temporary Employee**

An employee hired as an interim replacement or temporary supplement of the work force. Assignments in this category can be of limited duration or indefinite duration, but generally do not exceed one year.

## **Type of Expenditure**

A classification of resources or commodities that will be budgeted and charged to projects and activities by Cost Control Centers.

#### **Utilities & Pumping**

Consists of gas, electric and telephone, electricity wheeling charges, replacement power purchased and power purchased for pumping.

#### **Water Conservation**

Obtaining the benefits of water more efficiently, resulting in reduced demand for water. Sometimes called "end-use efficiency" or "demand management."

#### **Water Revenues**

Revenues generated through billing process from the sale of water.

#### Waterworks Fund

A fund into which are placed all revenues received for the operation of the water works system and plant together with all monies coming into said fund from other sources. Denver Water is allowed by the City Charter to have only one fund, the Water Works Fund, for all of its receipts and expenditures. The balance of the Water Works Fund is referred to in this budget document as the Designated Balances, Capital and Land Sales Account.

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